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<210> 3439

<211> 712

<212> DNA

<213> Homo sapiens

<400> 3439

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<210> 3440

<211> 840

<212> DNA

<213> Homo sapiens

<400> 3440

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<210> 3441

<211> 890

<212> DNA



<213> Homo sapiens

<400> 3441

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tttatacatt tanggagaca tgagacacat caattatgta gaagtcctta cttttcagaa  840
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<210> 3442

<211> 849

<212> DNA

<213> Homo sapiens

<400> 3442

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aaacaggact tattgtaggg ggtggtcaaa atagtcccgg cggggcgggg ccatgacccc  180
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 caagtgcagt tgatcagcaa aggccaacca aaccctttga aaaatattct aaatgaaaat 420  
 gacatagtat tcatagtgga aaaagtcct ttagaaaagg aagaaacaag tcatattgaa 480  
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 aacaacagca ttacaggaat tgncttatat gtggcagttg taaagctgat aaaaattatt 780  
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<210> 3443

<211> 802

<212> DNA

<213> Homo sapiens

<400> 3443

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<210> 3444

<211> 868

<212> DNA

<213> Homo sapiens

<400> 3444

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gcccttatga ttgtgaacct atttaatatg tttatcacat atggcgacac atttctgcca 360  
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<210> 3445

<211> 862

<212> DNA

<213> Homo sapiens

<400> 3445

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natttatgat gatgatcctg aaatcattac cattggaaag aagagaattt gagctgtggt 840
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<210> 3446

<211> 867

<212> DNA

<213> Homo sapiens

<400> 3446

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tgtataatgc tggttgatta gctgcttatg agctctttga cagtgttgat tttgatcagt 180
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<210> 3447

<211> 738

<212> DNA

<213> Homo sapiens

<400> 3447

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<210> 3448

<211> 715

<212> DNA

<213> Homo sapiens

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<210> 3449

<211> 775

<212> DNA

<213> Homo sapiens

<400> 3449

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<210> 3450

<211> 734

<212> DNA

<213> Homo sapiens

<400> 3450

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<210> 3451

<211> 664

<212> DNA

<213> Homo sapiens

<400> 3451

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<210> 3452

<211> 793

<212> DNA

<213> Homo sapiens

<400> 3452



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<210> 3453

<211> 770

<212> DNA

<213> Homo sapiens

<400> 3453

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<210> 3454

<211> 753

<212> DNA

<213> Homo sapiens

<400> 3454

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 ggcagtttct gaaatttttg ataaagcatc aagactcctt tttctgaaac gttcctnctt 660  
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<210> 3455

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3455

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tgagccattt gccatcatgc tgnttgggat ggtgacaaa ttttgagtg gtcacgcccc 720  
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<210> 3456

<211> 902

<212> DNA

<213> Homo sapiens

<400> 3456

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cagcaatgtc agcatgagca caggcaggga gaggcaagag gagcagagta aagggggaacg 180  
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catggaaata tcagtgggct ggaattctag ctgcctgaaa gaagacattc ctcacacaag 420  
 acctcacaat cataatccatg gaattatagc actgggctct ccagatgggtg ctacaggaag 480  
 acctccagaa atttgacgat cctctattca aggccctacc acagagacac acaggaacgg 540  
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 cccaccacta ttcacacctt tcacaagggc ccagccacaa agccagtgc acatgacatc 840  
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<210> 3457

<211> 789

<212> DNA

<213> Homo sapiens

<400> 3457

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 tgaacacaga tatcatcaga aaattacat tccctancag gatgttttcg tgtttgnatt 720

cgtatatgcc agttcatttc ctttgaaaaa aaaaaaaaaag tggaccccaa agtnggaagt 780  
gagaacctt 789

<210> 3458

<211> 772

<212> DNA

<213> Homo sapiens

<400> 3458

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cct atcc atg gtg ttg aagc gtc gag ccga ctagg gaacc tcct tcccc g ccagg atg ga 180  
agt cgc atca gtc gcc gct att gcg cgg g ctgt tct tcc ctgt gtt ctg ccg ccc gct g 240  
ccg catt cgc tgc cct ctgt ggct ttt ctg ctgg ctg aa gat cgg cct g gag cag cga c 300  
gcc acc gct g gca agg ccg agact ctg ta ggct tct ccc gaat ccc gtc gac ctcc agc 360  
cgct gag cgc cgc ggg cccta cct gag agac tgt caa gaaa aagg agat gg agc cgg ggg ac 420  
agg cgg atcg cgg aaa cggc ttgg ccct cg gg cgg gcttc cggt tct ggc cacc ctt ttt 480  
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act gct ctc cag ct cctt g cgc cgt ccc cgg att gctt cana aggt gc taattt ggag 660  
cca act tttt ggt gga atgt ttcc gacc ag atgg ctag at ttt gct ggag tctaca agcg 720  
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<210> 3459

<211> 760

<212> DNA

<213> Homo sapiens

<400> 3459

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 aataccttag tctcagcagg agctgtggat gggatattca agtctgattt tggattccac 660  
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<210> 3460

<211> 713

<212> DNA

<213> Homo sapiens

<400> 3460

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 catacagtga catgccatgg gaatgctgaa cactgagcaa cagtttcaac tagcgaattg 180  
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 ggaaaagaaa ggatttttat tttttattht tatthtttga gagatgagat ctactatgt 540

tgcccaggct ggtcttgaac tcctgaactc aagcaatcct cccggctcgg cctctgaaac 600  
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<210> 3461

<211> 675

<212> DNA

<213> Homo sapiens

<400> 3461

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 accagctcca aattctctgt catctgtcca gcagtcttac agcaattgaa ctttcaccca 180  
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 gaaagaatgc taaagatggt attaaagaca tatggtcaga atggtcatac ccacttttga 540  
 aatgataact ttggtcctca agaagaaact catcaaccta aagcattacc tgccatcaat 600  
 ggtgtgacat gctatgcaaa tcctgcntgg ccagaagct tatgggncat tttccatttt 660  
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<210> 3462

<211> 814

<212> DNA

<213> Homo sapiens

<400> 3462

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cttgttctag taatcaccta aaatattaga cacttaaaat gttggggaaa cgtaagcgtg 180  
tgggtgttgac aattaaggac aagcttgaca ttattaagaa acttgaggaa ggcatctctt 240  
tcaaaaaact ttccgtgggtg tacggaattg gtgaatccac agttcgtgat attaaaaaga 300  
acaaagaaag gattataaac tatgcaaaca gttcagatcc taccagtgga gtatccaaac 360  
gtaaatctat gaagtcacat acatacgagg agcttgatag agttatgata gagtgggttta 420  
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tacaccagag caaatttatg gtgctgatca aactggattg gtttggaaat gtctaccatc 720  
aaggacatta actcttgaaa ctgaccaaag tcttntgggt gtaggtcaag ccnaagaggg 780  
gaatcatcat tatgggggttg cncaaagcc caca 814

<210> 3463

<211> 867

<212> DNA

<213> Homo sapiens

<400> 3463

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tttaagactg acaaaggatt tgacaaagcc acttttgaaa gtcagatgtc tgtgatgagg 180  
ggtcagatct taaaccttac tcaggcattg agagacggga agagtccttt ccagctagta 240  
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 ttacaaaagg cctttgagga tgcctacgtc tgaaattgct cttacgaact ttaataaaat 780  
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<210> 3464

<211> 754

<212> DNA

<213> Homo sapiens

<400> 3464

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 gcagtgtctt ccataatcac caagacaaga agggagtgat tcgggaaagt tacctcaaag 660  
 gccacgacca gctgggtccc gtcacccttc ttggncattg cagtcacctt ggctttcgca 720  
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<210> 3465

<211> 808

<212> DNA

<213> Homo sapiens

<400> 3465

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 tggcgtatggg accacgacag cactatccct atggagggtcc ttatgacaga gtgaggacgg 180  
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 ctaggtccta aactagaaga ngaagaaga gaggaagtag ttgaaaatga tgaggagata 780  
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<210> 3466

<211> 791

<212> DNA

<213> Homo sapiens

<400> 3466

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agggtgctca taccctgctt tagcctagct gcttcttacg gagtgcaagg gagaactctg 240  
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<210> 3467

<211> 850

<212> DNA

<213> Homo sapiens

<400> 3467

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gtcttccagg aaaggacccc agacagtga tccaagttcc atatactcca tgtaccttca 720  
gcaagccaca ccacctaga attaccagcc cggagcaca caagcgcctt aaataatcag 780  
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<210> 3468

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3468

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gtaaaatgca aagtataaat gaagacttaa aagatatatt acatgctgca aagcagatag 180  
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<210> 3469

<211> 645

<212> DNA

<213> Homo sapiens

<400> 3469

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 agttgaaagg tgtgaaacaa gcctgctgtg aattcttaaa aaagtcaant ngacccctct 600  
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<210> 3470

<211> 792

<212> DNA

<213> Homo sapiens

<400> 3470

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<210> 3471

<211> 841

<212> DNA

<213> Homo sapiens

<400> 3471

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<210> 3472

<211> 813

<212> DNA

<213> Homo sapiens

<400> 3472

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<210> 3473

<211> 822

<212> DNA

<213> Homo sapiens

<400> 3473

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<210> 3474

<211> 638

<212> DNA

<213> Homo sapiens

<400> 3474

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 atttggttcc catattgatg ttataataga tgatcattat accttgacct tctttctctg 240  
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 ttctaaaact ggatatgatg gaggttatca cataaaatag atgatataag gcagttgaca 540  
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638

<210> 3475

<211> 788

<212> DNA

<213> Homo sapiens

<400> 3475

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 gctggtgacc atcagcctcc ttcccgacgt cctcaagaaa gtcctgtgcc ggcagctgtg 180  
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<210> 3476

<211> 696

<212> DNA

<213> Homo sapiens

<400> 3476

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<210> 3477

<211> 802

<212> DNA

<213> Homo sapiens

<400> 3477

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 cgtgccctgg agaaacatgc tgacagcatc ctggcactgg cttcagtatt ctggtccatc 240  
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anaaagccct tatgcctggg ctgtttgaag ggcaggcccc actggtggaa aaatgtaatg 780  
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<210> 3478

<211> 873

<212> DNA

<213> Homo sapiens

<400> 3478

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ttggtttttt tcatgaatat ttgcaagtaa ttaccattaa attcacacat gaaagattaa 180  
tctgaaagat cagagaccat gttattcctg accacgatag aactgctcct gtggtttggg 240  
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acctcaaaat gtattgagga tctgtgaaat gctaagtgcc caaaataaaa tattgctgat 360  
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cagaaatgn taattttaat aactgtccta tcataaatta atgttggaat aaattgaagt 720  
tggtgataaa tacttcatga aaactaaagt ctgaaataaa ttacttggtt tatgtccaat 780  
agctactacc atttgataga acagnttttg ganggaacca tttcattctt ggaaccccag 840  
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<210> 3479

<211> 807

<212> DNA

<213> Homo sapiens

<400> 3479

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<210> 3480

<211> 700

<212> DNA

<213> Homo sapiens

<400> 3480

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ctggcggctg gggcccaggt ggatgctcgc aacatcgacg gcagcacccc gctctgcgat 300  
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<210> 3481

<211> 891

<212> DNA

<213> Homo sapiens

<400> 3481

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 ccgacaattc gacccacac aaggaggatc taagcagcaa gattaaagaa caaaaaattg 180  
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<210> 3482

<211> 877

<212> DNA

<213> Homo sapiens

<400> 3482

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<210> 3483

<211> 684

<212> DNA

<213> Homo sapiens

<400> 3483

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<210> 3484

<211> 732

<212> DNA

<213> Homo sapiens

<400> 3484

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<210> 3485

<211> 724

<212> DNA

<213> Homo sapiens

<400> 3485

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<210> 3486

<211> 669

<212> DNA

<213> Homo sapiens



<400> 3486

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<210> 3487

<211> 908

<212> DNA

<213> Homo sapiens

<400> 3487

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aagcgtctca aggatgctct ccagaaacaa cgggaggttg cagataagcg gaaagagact 540  
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 ctttctaaac ttctggaggcg tacattctcc ttactgaaat gcgttgggtca agtttcggag 780  
 tcagaagatt ctattccaag cagaattgaa gccttaagac tgaaatggaa ttcaggatgc 840  
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<210> 3488

<211> 860

<212> DNA

<213> Homo sapiens

<400> 3488

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 tatttatgaa attattttaa cggtcaaaag attgttttta acatggttta atttcccaaa 180  
 aactacagtt ttttttctta gcatgctatt caggtaaaca gtcttataat aaagcatgtc 240  
 ccattgtcaa gaaacataaa gtgggtgtgaa taccactgaa aatatatata tagtatcttc 300  
 tgtaaataat agtacctgtg tgaataagga ataggcttgc ctcccagcca ggcaatttcc 360  
 tgagggcaca ctaatgatat cccttgagtt gctaagtiga tgctgagaca ttttgctggg 420  
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 ctattcacgg agaggaaggt gttttgcttc tgtagatctc aaggactat tttgtggctc 660  
 tcancaggaa gtagaattgg tcctaaatgt gtgctgaatg angacatgat gtcccttctg 720  
 gtgccaggac acattctgca tggcattctg tgaaaggcat cctgctgagg ataatgccag 780  
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ctgaacttac cattcagagn

860

<210> 3489

<211> 795

<212> DNA

<213> Homo sapiens

<400> 3489

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 cccaggctcg accccggccc tgcatagcag cccggcacag ccgccggcgg agacagctaa 180  
 cgggacctca gaacagcatg tccggattcg agtcatcaag aagaaaaagg tcattatgaa 240  
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 aagtaggaac cacagcagtg ggatggacgc agtatttcct gccaatcag accagaaac 720  
 ttcagtgcctt gaaccttctg ccggagcccc aagtggncgc cttcattcgc ctgnttgncc 780  
 caaaacttgg cttca 795

<210> 3490

<211> 844

<212> DNA

<213> Homo sapiens

<400> 3490

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 tctggtcaga tgtcgaacac aaaatgtggg cattctgcac ggaaggaaag atcaggcttc 180  
 tcttgctgag tgtgtgaaga caggagagagc caggccccag cagatgcggc ctagcacact 240  
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 ctattgtgct gtcttctgt gaccagcaga tctgtgaagg gggatgcct aattcttggg 780  
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<210> 3491

<211> 902

<212> DNA

<213> Homo sapiens

<400> 3491

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 gccacttcaa agaatttact ctgggggtcaa aaccacata ttttaataaac ataggaatga 180  
 ttttgttgat tttccattgc tgtcacaaga acagaaagca cacattagga gaaaacctta 240  
 cgaatgtaat gagcaggga aagtcttcag agtgtcttca agccttccta atcatcaagt 300  
 aatccacact gcagataaac ctaacagatg tcatgaatgt ggtaaaaccg tcagggacaa 360  
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 agagagtcct tacaaatgta atgagtgtgg caaggtcttc agtcgaatta cataccttgt 540  
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 caaatgtaat aaatgtggca aagaatttag tgggcattca agcctnacca cccatctgtt 720  
 aatccacact ggagagaaac cttacaaatg taaagaatgt gacaaagctt ttaggcacaa 780  
 gtctcctgac agtcatcaga gaaatcatat gggagagaaa ccttataatg tcatgaatgt 840  
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<210> 3492

<211> 692

<212> DNA

<213> Homo sapiens

<400> 3492

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 gccccaggga ctggaagaaa ttacagtgcc tacttggaaa gaagaagaga tagcgacttg 180  
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 gagccgtcac ctcccagaat gactagtgcc gcccttgcta agaaacccta ccgtaaggca 420  
 ccaccagagc atcgggagct gcgtttggaa attcctggat cccggcttga gcaggaggaa 480  
 cccctgactg atgcagaaag gatgaagctc ttacaggagg agaatgaaga gcttcgccgg 540  
 cgcctggcct ccgccaccag acgcactgag gcccttggaac gtgagctgga aattgggcag 600  
 gactgcctgg agctggagct gggccagagc cncgaggagc tggacaaatt taaggataaa 660  
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<210> 3493

<211> 739

<212> DNA

<213> Homo sapiens

<400> 3493

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tggaaggcc tttagccagg ggtnacacct tattcagcat canaggagtc acattggtga   180
gaaaccctat gagtgtaatg agtgtgggaa aacctttggg cagatatcca ccctaattaa   240
gcatgagaga acacacaatg gagagaagcc ctatgagtgc agtgactgtg ggaaggcctt   300
cagccagagt gcacacctta tccaccatca aagaattcac actggagaga atccctatga   360
gtgcagttaa tgtgggaagg ccttcaatgt ttgttctctc ctcatcagc atcacagaat   420
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tgagaaatcc ttcantgcat gcttatccct tatccaacac aagagaattc aacttgata   600
gaaaccctat gtatgtgcca aatgtggaaa atccttctga caaagctctn accttattca   660
acatcagaga attcacagtg gggagcaacc tcatacgtgt aatcgatgtt gaaaaaacct   720
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<210> 3494

<211> 724

<212> DNA

<213> Homo sapiens

<400> 3494

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acttgagtcc tcagggtgtg tgactccaaa gctgacaagc aggtggcatt cttcttcaga   180
    
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gcagggcaag tgtaattctg gaccaatgtg tgattctgag accagaccaa ccaactgaag 240  
 gagccaagtt acaccctggt taaccctgcc ttcaaaggga cgactctgta agattctctg 300  
 ctacttattc aagttgacac gatgcccttc aactccacc tgaggtcccg cttccctct 360  
 gccataagga gtttgattct aaaaaagaaa ccaaacatca gaaatcacatc cagcatggct 420  
 ggagagctcc gaccagccag cctggtgggc ctgccaggt cccttgctcc agcttttgaa 480  
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 aaatacgagt tcggtgcctg caccggtagc ctggcttcgc tggagcagta ctgggagcan 660  
 ctgaaggaca tgggtggcctt cttcctgggc tgcagcttct cctggangan gccttgagga 720  
 aagc 724

<210> 3495

<211> 910

<212> DNA

<213> Homo sapiens

<400> 3495

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 cgagatcccg ggcgggggca ccgagggtta ccacgttcag cgggtacaag aaaattcccc 180  
 aggacacaga gctggtttgg agcctttctt tgattttatt gtttctatta atggttcaag 240  
 attaaataaa gacaatgaca ctcttaagga tctgctgaaa gcaaacgttg aaaagcctgt 300  
 aaagatgctt atctatagca gcaaaacatt ggaactgcga gagacctcag tcacaccaag 360  
 taacctgtgg ggcggccagg gcttattggg agtgagcatt cgtttctgca gctttgatgg 420  
 ggcaaatgaa aatgtttggc atgtgctgga ggtggaatca aattctcctg cagcactggc 480  
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 aggcagccta ngatgtggca ttggatatgg gtatttgcac cgaataccta cacgccatt 720

tgaggaagga aagaaaattt ctcttncagg acaaatggct ggtacaccta ttacacctct 780  
 taaagatggg ttacagang tccaacttgt cctcagttaa tccccgtnt ttgtcaccac 840  
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<210> 3496

<211> 761

<212> DNA

<213> Homo sapiens

<400> 3496

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 tgtgactacc ctggttacct catataatct ccctggaaaa ggagacatga atgtctgcaa 180  
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<210> 3497

<211> 893

<212> DNA

<213> Homo sapiens



<400> 3497

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 gtggcatatt ctggatgtga tgagaaatct cattggcatt tgggacactg gcatnccana 840  
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<210> 3498

<211> 827

<212> DNA

<213> Homo sapiens

<400> 3498

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 tcctgttacg accaggagag ggctgcggga ctctcattcc tctgaagagg atgaagcatc 180  
 ttcccaaact gatttaagcc aaacgatctc aaagaaaact gtcaggagca tacaagaggc 240  
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 gatagctgct cttgcctctg ggagtttttg ggtcttttagt actnctgagg tagaaaccac 780  
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<210> 3499

<211> 681

<212> DNA

<213> Homo sapiens

<400> 3499

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 aatcatagag gcaagtgggg gaggagcgtt ccttgtcctc cctctgcaca agactgggtcg 300  
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 ngcaagctgt gataatgcca ttatcatctg gaatgtggga acaggggaag cccttataaa 600  
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<210> 3500

<211> 774

<212> DNA

<213> Homo sapiens

<400> 3500

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ggaaatggtg tcccaattgc acgggaatgc tacctcaagc acgactgtgc gccgnttgcc  720
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<210> 3501

<211> 790

<212> DNA

<213> Homo sapiens

<400> 3501

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gagccaggag agtagctaca atgacttcac cagtactggt ggacatacga gaagaggtga  180

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 gaagctgccc tgtgtgccag accagctacc agccaggga cctgcggcct aatcggcatc 360  
 tggccaacat agtgaggcgg ctgagagagg tagtggtgg ccctgggaag cagctgaaag 420  
 cagttctttg tgcagaccat ggagaaaaac tgcagctctt ctgtcaggag gatgggaagg 480  
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<210> 3502

<211> 748

<212> DNA

<213> Homo sapiens

<400> 3502

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<210> 3503

<211> 717

<212> DNA

<213> Homo sapiens

<400> 3503

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tccagaatgc ccagggccag tttctttatg cctaccgctg tgcctaagc cctcatcagg 660  
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<210> 3504

<211> 693

<212> DNA

<213> Homo sapiens

<400> 3504

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<210> 3505

<211> 851

<212> DNA

<213> Homo sapiens

<400> 3505

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<210> 3506

<211> 692

<212> DNA

<213> Homo sapiens

<400> 3506

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 aaaaagtcta cagggtgatc cacagcagct ctgcttggang tgttggatcc tgaacaaaac 660  
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<210> 3507

<211> 681

<212> DNA

<213> Homo sapiens

<400> 3507

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tagcaaagt gaatgaaagt tcattcatga tttgtctccc tgcttgcctg ttgtttgtgc 540  
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<210> 3508

<211> 702

<212> DNA

<213> Homo sapiens

<400> 3508

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cagaaagact tcttctaatt gcaactggga agagaacact tttgattgat gaattgaata 600  
aattgaagaa cgaaggacct canaggaaga ataaggctag tccccaaagt gaatttatgc 660  
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<210> 3509

<211> 597

<212> DNA

<213> Homo sapiens

<400> 3509

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<210> 3510

<211> 621

<212> DNA

<213> Homo sapiens

<400> 3510

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aaggatgctg cgagtgtgta gaggggagat gaaatggcca ggtgacatcc tcacaggatt 180  
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<210> 3511

<211> 774

<212> DNA

<213> Homo sapiens

<400> 3511

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 ctccaaccaa gtcagaactg cgatgccagg gtttgaactt cagtgggtgt gntctntctc 720  
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<210> 3512

<211> 873

<212> DNA

<213> Homo sapiens

<400> 3512

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<211> 879

<212> DNA

<213> Homo sapiens

<400> 3513

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<210> 3514

<211> 892

<212> DNA

<213> Homo sapiens

<400> 3514

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 acagtgatag tagcagtgc aatgagcaag actttgnttc ctccattcta ccaggaaaca 720  
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 gctggtcaca aagctaactt ccaaacacca aggaccaagg aacaggacag tagtagatgt 840  
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<210> 3515

<211> 786

<212> DNA

<213> Homo sapiens

<400> 3515

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<211> 849

<212> DNA

<213> Homo sapiens

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<210> 3517

<211> 857

<212> DNA

<213> Homo sapiens

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anaggatgac ttcaacaaca ggctgaacaa ccgggccagt tttaanggct tgaacggcct 780  
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<210> 3518

<211> 826

<212> DNA

<213> Homo sapiens

<400> 3518

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<210> 3519

<211> 894

<212> DNA

<213> Homo sapiens

<400> 3519

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<210> 3520

<211> 805

<212> DNA

<213> Homo sapiens

<400> 3520

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<210> 3521

<211> 724

<212> DNA

<213> Homo sapiens

<400> 3521

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<210> 3522

<211> 842

<212> DNA

<213> Homo sapiens

<400> 3522

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<210> 3523

<211> 850

<212> DNA

<213> Homo sapiens

<400> 3523

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 gtgaacgagc caaggatatg cacctagtga agaaactagc agccttactg aaaacaaaaat 180  
 ctcccaatct tgatttggtt gaaacagaaa taaaggaatt aattcttgat attaaatacc 240  
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<210> 3524

<211> 828

<212> DNA

<213> Homo sapiens

<400> 3524

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 tgtacagacc gagatcttca ggaaatagga attccttttag gaccaagaaa gaagatatta 720  
 aactatttca gcaccagaaa aaactcaatg ggtattaaga gaccagcccc gnancgtgtn 780  
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<210> 3525

<211> 803

<212> DNA

<213> Homo sapiens

<400> 3525

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ngnctgggtg tccctatggt cct 803

<210> 3526

<211> 703

<212> DNA

<213> Homo sapiens

<400> 3526

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703

<210> 3527

<211> 761

<212> DNA

<213> Homo sapiens

<400> 3527

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<210> 3528

<211> 778

<212> DNA

<213> Homo sapiens

<400> 3528

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<210> 3529

<211> 799

<212> DNA

<213> Homo sapiens

<400> 3529

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 agctcatcct atccaagctt ctgagggagg aggacaacaa gtactgcgcc gactgcgagg 180  
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<210> 3530

<211> 834

<212> DNA

<213> Homo sapiens

<400> 3530

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<210> 3531

<211> 812

<212> DNA



<213> Homo sapiens

<400> 3531

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<210> 3532

<211> 790

<212> DNA

<213> Homo sapiens

<400> 3532

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<210> 3533

<211> 867

<212> DNA

<213> Homo sapiens

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taaaagtttt gaaaacatca gcaaattggct tanaaacata gatgaagcat ccaatgaaaa 840  
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<210> 3534

<211> 801

<212> DNA

<213> Homo sapiens

<400> 3534

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tgtgcctacg cttcttgccg catgaagggg taccagcttg gcgggcgtgg aagcccgggt 720  
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<210> 3535

<211> 741

<212> DNA

<213> Homo sapiens

<400> 3535

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agcccagctg gtgcccaccc cgcactctgt ccatttcata agagcccttg gtttctcac 660  
ttccctcaga ttttgccaag agaatggtcc tgggtgtggcc canaaaggcc ancggggtgc 720  
ancctgggac tgaaaagcag a 741

<210> 3536

<211> 601

<212> DNA

<213> Homo sapiens

<400> 3536

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taagagcctg gtggtggccc acgcgcagtg ctgcgtcgtg ctgcggtttc tgaagtttcc 180  
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nccaaaatgt gggtttattc ctttctcgag tgatgtcacg catgagatga agcataaggt 540  
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<210> 3537

<211> 744

<212> DNA

<213> Homo sapiens

<400> 3537

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gagtaagccg gtggcagtcc cagaagagca gcctgttgca gaatctggac tattagcgag 180  
ggagcctgaa gaaataaatg cagatgatga gatagaggat acatgtgacc acaaagagga 240  
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<210> 3538

<211> 839

<212> DNA

<213> Homo sapiens

<400> 3538

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ccaagatttt ccaattctaa tgctgagagg atacagagga aaacagaaag aatgctggct  180
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<210> 3539

<211> 760

<212> DNA

<213> Homo sapiens

<400> 3539

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atgatcgaga tgatggccgc aggaaaccaa ttgctggagg aggaggtttt tcagacaagg  180
atcttgaaga catagtaggg ggtggagaat acaaacctga caagggtaaa ggtgatggcc  240
ggtacggcag caatgacgac cctggatctg gcatggtggc agagcctggc accattgccg  300
gggtggccag cgccctggcc atggccctca tcggtgccgt ctccagctac atctcctacc  360
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 ctctgggtgt ttgtgagttt ggnttctctg gccttgccca agcgtgctga gacttggtgc 720  
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<210> 3540

<211> 813

<212> DNA

<213> Homo sapiens

<400> 3540

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 gccgcgcgcc cagccatgaa cctggcgagc cagagcgggg aggccggcgc cggccagctg 240  
 ctcttcgcca acttcaacca ggacaacacg tccctagctg ttggtagtaa gtccggttat 300  
 aaatttttct ccctttcttc tgttgataag ctggaacaga tctatgaatg caccgatacg 360  
 gaagatgtgt gcattgtaga gagattgtt tccagcagcc tagtggccat cgtgagcctt 420  
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 gcgtacccag ggagcgcgac catcgagag gtgcaggtct tcgataccat taatttgaga 720  
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<210> 3541

<211> 828

<212> DNA

<213> Homo sapiens

<400> 3541

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cagtgtgttt ttgtcttgga gacctggata tattaacctt ccaagctgag aaacttggat 780
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<210> 3542

<211> 789

<212> DNA

<213> Homo sapiens

<400> 3542

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ccatgggaag gctgtaccaa aatgtgtcaa ggtcttcagc gaagaaacat aacttgcata 120
cataagagtg atcatagtgt tgtgtctgat aaagaatgtg accacttgcc acttccatca 180

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 tccattcacg aaggacagac tgttcaagtt gatgaccact actgtggtga ccagcttaaa 360  
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<210> 3543

<211> 852

<212> DNA

<213> Homo sapiens

<400> 3543

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 atgtgccaag cccagaaaa ggttcgtggg atggctatta aggatctcaa tgcagaactg 480  
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atgactgctt tgagactcan ctggcttaaa ctgggccata ccccggcatt tggatctata 780  
cagaaacaat tgtacanggg acgcatgagt cttggtcaca gccctggagc tgatcaccta 840  
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<210> 3544

<211> 738

<212> DNA

<213> Homo sapiens

<400> 3544

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<210> 3545

<211> 695

<212> DNA

<213> Homo sapiens

<400> 3545

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<210> 3546

<211> 879

<212> DNA

<213> Homo sapiens

<400> 3546

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<210> 3547

<211> 685

<212> DNA

<213> Homo sapiens

<400> 3547

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<210> 3548

<211> 762

<212> DNA

<213> Homo sapiens

<400> 3548

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gcagtgtccc actgcccgcc tttctctgca gctggctggg atggaggggg ctgccctgag  180
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<210> 3549

<211> 794

<212> DNA

<213> Homo sapiens

<400> 3549

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tgtgtacttg gccaagagtc tggcggaaaa gctgtatcta tttcagtacc ctgtgcgtcc  180
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<210> 3550

<211> 847

<212> DNA

<213> Homo sapiens

<400> 3550

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<210> 3551

<211> 821

<212> DNA

<213> Homo sapiens

<400> 3551

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gaagaaatga cacctacctc agtcattcct aaattaccac agtgtctacg ggaggaagaa 720  
gagaaggaga gcgacttctg attcagaagg tccattcag taccgagatg aagaagatga 780  
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<210> 3552

<211> 756

<212> DNA

<213> Homo sapiens

<400> 3552

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gtgtgccaga gtctccagaa ttcgtcaggg tcagatcata tgaatcccaa atggttatcc 480  
gtccccacaa gtcatttgat gagaatggct ttgactactt actaacatac agtgacaatc 540  
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<210> 3553

<211> 647

<212> DNA

<213> Homo sapiens

<400> 3553

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ccccggggcc cgcgcccgct gcctccagca cgcgcgctcg caggctcggc aagcgaagag 180  
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cccgnacgct cgctcgctcg ggagagtcgc gggcggnccgc ttgggcgcac ttgccgggtc 540  
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agctgacgcc anncaggag agagtacat ggatggnata ttgaaca 647

<210> 3554

<211> 717

<212> DNA

<213> Homo sapiens

<400> 3554

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cggagtcagg gcgctgaggg agcgttgaca gggaagcagc cggatggatc tgcagaaaag 180  
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cacgctttgt cttatgatca ggcaaagcgg gtgcctagat gggttcttga acataatttc 300  
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accttacctc agactagagg cgatggaaag aaaatagtta gttaccaggt gattggcgag 660  
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<210> 3555

<211> 714

<212> DNA

<213> Homo sapiens

<400> 3555

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 gagccaaggt ggtgtcagag ggcaactgga tgactcgcag taccacagca ctgggacaga 180  
 cagaagccac acctttcttt tgggtttttg ccaagcctcc tccatctccc atcagtgtgt 240  
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 ctgtttctca agcagaggca ggaagagcta gtcttagcat ttatatttta ataggaagtt 420  
 gactcccagc atgtaaaagt gatccacgca gccggagtgt atgccgggag ctaagtggtc 480  
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 gggagtgggt ctctgcaagg gctctgggat gagtcttggc ttccaagagg acaggctatt 660  
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<210> 3556

<211> 870

<212> DNA

<213> Homo sapiens

<400> 3556

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 aaaaacttgg gacttgaatt ttagctcca tttacatgga tccattgccc cagctactgg 180  
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 tttattacag tcaatattcc ttcactgga tgttctgtga agatagccat gtttatgggg 300  
 gtcttagttt tcaaactctg gcaactctgt gaaaaatagg agcaaactag agagccctgg 360  
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 taaaggaatc agctgtcatc attttcatca ttattatttt ggtaggatg gcttgaaaat 480  
 cagaacgtat cttggtttac gtaattgagg tcttaaagaa ctaagaacag ttaaatagtc 540  
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<210> 3557

<211> 873

<212> DNA

<213> Homo sapiens

<400> 3557

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 aactttgcaa gaaactctgg aagcacttag cctctctgaa tatttttagca cttttgaaaa 240  
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<210> 3558

<211> 806

<212> DNA

<213> Homo sapiens

<400> 3558

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ggcatcaagg tgctcctgtc cttactgtcc attaagatgc ccatcacaga tgcagaccaa  240
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<210> 3559

<211> 839

<212> DNA

<213> Homo sapiens

<400> 3559

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ctctgagcca ggaactgaag ttaaaagatg aagaatgtga gaggctttca aaagtgcgag  180
    
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atcaacttgg acaggaattg gaagaactca cagctagtct atttgaggaa gctcataaaa 240  
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 aagcttctgc agttgaatgc cgaggacca aaaaaatgtg ctctactggg ccanagtaag 780  
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<210> 3560

<211> 777

<212> DNA

<213> Homo sapiens

<400> 3560

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<210> 3561

<211> 743

<212> DNA

<213> Homo sapiens

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<210> 3562

<211> 814

<212> DNA

<213> Homo sapiens

<400> 3562

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<210> 3563

<211> 887

<212> DNA

<213> Homo sapiens

<400> 3563

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<210> 3564

<211> 796

<212> DNA

<213> Homo sapiens

<400> 3564

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<210> 3565

<211> 834

<212> DNA

<213> Homo sapiens

<400> 3565

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aataatactg gaaattctac actgaaacct ncagtacctt agaggtaaga ctcanggccc 780
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<210> 3566

<211> 772

<212> DNA

<213> Homo sapiens

<400> 3566

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cggggtggggt cggcgcttgt cgcgtgtggc ggcagtgagg gcgggcggcg ggaggggggt 180  
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 tgcatacagt ttgcaccacg tgtctggagc aactggagcc cttctngtag tggacattcc 720  
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<210> 3567

<211> 875

<212> DNA

<213> Homo sapiens

<400> 3567

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 cctcgacaaa atagatatgt ctttgatga tatcatcaag ttgaatcgaa aggaaggga 240  
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 caggatgaga gtgcgatggg gaatccaaca gaattctggt tttgtaaga ctagtctgaa 360  
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 tgacaagaat atagaacaat attttccagt gttaaaaagg aaggcaaacc ttctgagaca 540  
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tcgtcaggca acttttcttt tcagaagaag cctgaaagtg cangcccagt tgaatacaga 720  
 acaactgcta gacgatgtag tacaaagaga ctcgtcaatg gcggactttc accacaaatg 780  
 gagggatttt gactggatct attgacaatc ctggaacaat gcaatgccca tactnagaaa 840  
 ccacgattaa ctctactggt gnaccttcat tttna 875

<210> 3568

<211> 772

<212> DNA

<213> Homo sapiens

<400> 3568

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 tcaaactatc gaagctcact ccaggcctgt atgaattcaa agtgattgta gaggggtcaaa 180  
 atgcccattg ggaaggctat gtgaacgtga cagtcaagcc agagccccgt aagaatcggc 240  
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 tcattgatgg cagtcaaagc actgatgatg ataaaatcgt tcagtaccat tgggaagaac 360  
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 aactcgtccc tgggaactac actttcagct tgactgtagt agactctgat ggagctacca 480  
 actctactac tgcaaacctg acagtgaaca aagctgtgga ttacccccct gtggccaacg 540  
 caggcccaa ccaagtgate accctgcccc aaaactccat caccctcttt gggaaccaga 600  
 gcactgatga tcattggcatc accagctatg agtggctcact cagcccaagc agcaaaggga 660  
 aagtgggtga gatgcanggt gttagaacac caaccttaca gctctctgcg atgcaagaag 720  
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<210> 3569

<211> 873

<212> DNA

<213> Homo sapiens

<400> 3569

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 ctccagcctg ggcgacaaaa tgagaccctg tctcaaaaga aagccctctc cttagctgag 180  
 cagaggaagg gaaggagtgt ggctatgaga atatgattta tgccattttc tgtttttaaa 240  
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 aatagacat attctttgaa tttaaattgt ttttaatttt ctctacacat ttttttttc 360  
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 tatgtgggtt gccatgttan ccactaaatc tgaactttta ccctgctttc atcatggatt 780  
 tttttgggta acccggaac aagtcccaat gcttncctggg cctgggtttcc tcatttgcac 840  
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<210> 3570

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3570

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ggggggagcc ccatcgctctc cagcgcggga gcctatctca tccacggggg gatggacagc 360  
 accagacact ccctggccca cacctcccgc tcatcgcccg ccacgctcca gtggctgttg 420  
 gataattatg aaacagcgga aggtgtgagt ctccccagaa gttctcttta caaccactac 480  
 ctteggcact gccaggagca caagctagac ccagtgaacg ccgcctcctt cgggaaactg 540  
 atccgttctg tgtttatggg gctgagaacg cggcggctgg gcaccagggg caactcgaag 600  
 taccattact atgggattcg tctgaagccg gactcaccac tgaaccggct gcaggaggac 660  
 acgcagtaca tggccatgcg gcagcagccc atgcaccaga agcccangta ccggnacagcc 720  
 cagaagacgg acagnct 737

<210> 3571

<211> 840

<212> DNA

<213> Homo sapiens

<400> 3571

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 aagcaggcta ccagcaattt tgagaacttg caaaaacagc ttgcaaggaa aatgaagctt 180  
 cctattttca tagcagatgc attcacagca agagcatttc gtgggaatcc tgctgctggt 240  
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 tgctttggac tgagatgggt tacaccagcg agtgaggctc cactctgtgg ccatgccacc 420  
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 gtcactctga gtggagaact aagggccaga cgagcagagg acggcatcgt cctggacttg 540  
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 cgcctcagt acgtttacaa cangtcgttt ctggagaacc tgaagtgaca cngagaatct 720  
 gctgcagttg aaaacacagg gaaggtgaaa ggcttattct tacccttaa gganacctgg 780  
 tgggcaaccc aacatttgct ttactcaaan attttcccg gggtggngc tgaaacctg 840

<210> 3572

<211> 514

<212> DNA

<213> Homo sapiens

<400> 3572

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tatacttggc ggggaggccc atgtgcgtaa ggctgagagg tggaaagagc tggctgctat   180
agagctagtg aggttgcttt caggaagcag ccaagtacag atgccacggc cgagcatgat   240
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ggaattcgaa accagcttgg ccaacatggg aaaaccccat ctctacaaa acaaatacaa   360
aaattagctg ggcgtggtgg tgcacgcctg taccanttac ttgggaggct gaggtgagaa   420
gggattgatt gagccctgga aggtaaggct acagtgagtc atgatgggtg gcanancaag   480
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<210> 3573

<211> 849

<212> DNA

<213> Homo sapiens

<400> 3573

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atgccaggac attccagaag gtgggaaagg cacctgagta atttgactct cctgcctgga   180
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tgagattgca tgctcctgcc tgggctgtgc ccacagtac cttgtgacat atatctgcat   300
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gactttctccc tggaagcaga caccagggat cgtcactccc gtggatgata aaaggcgcct 420  
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 attgtatgaa cacccatcaa acagtacaca tcatcattgt gagttctgaa tctcacacat 660  
 agaggaagtc aaagggtgaa aacttgactc tcatatttgg atccagtcca caggtgtgat 720  
 tttgacgcac acttctgccc ancacctgag taatgtgatt cttcanaatt ggcccgggcc 780  
 acaaatagga ttgtgccaca ctgctggacc cantgcctaa atgatgtaac tctattcttt 840  
 ttgncttgg 849

<210> 3574

<211> 725

<212> DNA

<213> Homo sapiens

<400> 3574

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 cccccacata ccaactgtatt ccccgccacc atggatgacg tccccgcccc aacccttgca 120  
 ccagcaccgc ccgccgctgc cgcggccagg gtcccgtttc actgcagtga atgtggcaag 180  
 agcttccgct accgctcaga cctgcggcgc cactttgccc ggacacagc gctcaagccc 240  
 cacgcatgtc cgcgctgcgg caagggtttc aagcacagct tcaacctagc caaccacctg 300  
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 tccaccggcc tgctgcacca ccaggtcgtc cacactggtg agaaacccta ctgctgcctg 420  
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 cgtgggggttc tccccctctc cctgcagccc ggccctggcc tgcccgctt gagtgcgccc 540  
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 ggagagggcc ccgagggggc aggCgcgggt ctgggcagct gggggctggc agaagcggca 660  
 gctgcggccg cggctcttgc cccattttgc gtgcngcgcc tgcgcgcggn gcttgacacg 720  
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<210> 3575

<211> 710

<212> DNA

<213> Homo sapiens

<400> 3575

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agaggggaact gatctcgag ctccttgggg atcttgggta tgtttgacct ttttactttc 660
anggagcang gattggatca aagtcattgc atntagagta ccgggggaac 710

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<210> 3576

<211> 814

<212> DNA

<213> Homo sapiens

<400> 3576

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ctataaaatc tcagtaccag ttccacccc ctctcattgc acccgcggcc attcgggacg 60
gggagctgat ctgcaatggg atccctgagg aatcacagat gcaccttttg aactctgagc 120
acttagccac ccaagcagag cagcaagagt ggctctgtag tgttgttgcg ctccagtgca 180

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gcatattgaa acatttatct gctaagcaga tgccttcgca ttgggactct gaacagacag 240  
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<210> 3577

<211> 743

<212> DNA

<213> Homo sapiens

<400> 3577

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 tcagcttatg gaagaagaac cagtgtcaga tttcgcagtt caggaatgac tttagacaat 180  
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cangccggat gcanagtggc gatataatta tcagaaagat tattaagtg tgtccagttt 720  
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<210> 3578

<211> 812

<212> DNA

<213> Homo sapiens

<400> 3578

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<210> 3579

<211> 725

<212> DNA

<213> Homo sapiens

<400> 3579

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caaacggagg ttccagtacg aagaagaagt gaaggcgaat ccacacaatt atgatgcatg	660
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<210> 3580

<211> 731

<212> DNA

<213> Homo sapiens

<400> 3580

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<210> 3581

<211> 875

<212> DNA

<213> Homo sapiens

<400> 3581

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 tgaagatcaa gatgtgagga agaaaaagat accacggttc cttaaagag agaattgat 840  
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<210> 3582

<211> 816

<212> DNA

<213> Homo sapiens

<400> 3582

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aacactacct ttgctgtaat ttcatttgag attttctaag ggtagaattt ggtctcacca 60
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cagggtacat tacataaaac aatggaggat gcctcatttt agcaaactag gtttctttgt 180
attcttcagt ccttttacag aattgatgtg ctaactgaat atcattgcag caactagact 240
aagatattca agatctcttt attggggatg ggagaaatag ggaaagaaat gtgtataagt 300
aattatgata ttgcaaaagt gatacttaga ttttacagcc tcagtagtct gcccagtgct 360
cacattaatg aaggatccat gttttagtg agagaaaaaa accccaaggt aaccgatat 420
gatttaggat gcatatcagt tctaacaatt caatcagaag tcaagctcat tggaattcct 480
tttttaactg atccaaatac tagtagaagg gggagggaga ggtgttgggt ttttttttaa 540
gtttttatth aattttgttg gttagaattt ttttctgttt ttggcatcct acataatacc 600
ccccttcttg actttttctg ataattagct gatattcatg gttgnttagc acacagttca 660
ggacctttga gatcatgttt gtataagcac tccttgaaga atatctaagc ttttctgana 720
tgggctttta aaatataatn agggaaagta ttttctgcgg ttttgcaaga ataaccaagc 780
cctggaatta atttttcatt ggganccgat taaaat 816

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<210> 3583

<211> 713

<212> DNA

<213> Homo sapiens

<400> 3583

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agagtccgcg ccctgcgtcc gcgaccagga ggatcggacc ttcgccttcg ctgtcgccgc 60
cgccgccgcc cgcggccgct ggggctatta gtgaaagatg gtggatcgct tggcaaacag 120
tgaagcaaata actagacgta taagtatagt ggaaaactgt tttggagcag ctggtcaacc 180

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tttaactata cctggacgag ttcttattgg agaaggagta ttgactaagt tgtgcaggaa 240  
 aaagcccaaa gcaaggcagt ttttcttggt taatgatatt cttgtatatg gcaatattgt 300  
 catccagaag aaaaaatata acaaacaaca tattattccc ctggaaaatg tcactattga 360  
 ttccatcaaa gatgagggag acttaaggaa tggatggcta atcaagacac caactaaatc 420  
 ttttgcagtt tatgctgccca ctgctacgga gaaatcagaa tggatgaatc atataaataa 480  
 atgtgttact gattttactct ccaaaagtgg gaagacaccc agtaatgaac atgctgctgt 540  
 ctgggttcct gactctgagg caactgtatg tatgcgttgt cagaaagcaa aattcacacc 600  
 tgtaaatcgt cgccaccatt gccgcaaatg tgggttttgt ggctgngggc cctgctctga 660  
 aaagagattc ttcttcccag ccagnccttt aancctggcc ggatttgga ctt 713

<210> 3584

<211> 666

<212> DNA

<213> Homo sapiens

<400> 3584

gtcctaagat ggctgctggg cgaccacttc ctgacagctc cagttaacgg gactgccagc 60  
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 ctctcttttg ggattggagt gtggcattgc cgccagaaag cctgcagaat tccgggttgt 180  
 gcagccaagc aggaacggtg tacctttcta gaccatcct cttgcaatct tggaccctaa 240  
 gaaaagatgt ggagtgggct gctacctcct ggcctaaatg aaagtgcgc tgagtcaaac 300  
 tcggaagatg aagctacgtt ggagaactct ggacttaact tacaggaaga taaagaggat 360  
 gagagcatca gaaaaacaga aatcatagat ttctcaacag atgaaccaa aactgaaaca 420  
 gagtcaaatg taaatgccta tgaagagtgt ctttctggaa ttcccataga tatgtggaat 480  
 aaatttcaag aattgcataa aaaacattct gaacagaaaa gcacaacctc aagattcaga 540  
 gggaaaagaa gaaaacgctc cagaaaagat aaattgaaga atgaaaaaga attacatagt 600  
 gaaccgtcct caatgaaacc agtgggaaga gcttacttag nattttnggg gccatggttn 660  
 aattta 666

<210> 3585

<211> 781

<212> DNA

<213> Homo sapiens

<400> 3585

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atgcgaggct ggggccggtt gcctaccggc cgcttctcgc cgaggcagtc cagacttttc   60
ccccggcggt gcccgtcca agacagcatc tgtcaacgct cctcttctcc cctcctcctc  120
ctgccggggc gggctccgcc ggctgcggcc gagaggacgc gggacccggc gcggtgagcc  180
catcagctgt caggcgagcg gcgaagcggc tggagggcgg cgagagacac acaaagaacg  240
cgggtgggcgg cggcggcgaa aggggacggc aactcctccc cgcgcccgcc ggtgccaccg  300
ccggccgtgc ttgttccgag gccgcgcaga caatgcggcc gggctcgtcc ccgctgtccc  360
cagagtgcgg agcgcccgcg ctccccgac cccaacttga ccgtctcccg gctcgcccag  420
ccccctcccg gggtaggggc gccccctccc tccggtggcc ggccaaggaa gtcggtccgc  480
ggccgcagat cccggcaact tgcgaaccgg gaaaagtttg cggcgcctcc gcggggcggc  540
gcgacgcgtc ccgcccctcg cgtccgcggt catcgcggtt gactttctcg actcgtcgtc  600
agccggggcc gagcgcggn c ggtggggact gcggggcggg cccggagtcc gtccgaggtc  660
ttccgacctt gggcttgcgg atttcangta cttccacttg ggcattttct cttcatggac  720
ccttatagca accaaaaagt ggtttancaa aacaaccgga acattttttg ggatttaatn  780
t                                                                 781

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<210> 3586

<211> 489

<212> DNA

<213> Homo sapiens

<400> 3586

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tgtgaattgg gccagaagat cagagtgnaa tatngntaat actccaaagt atgctaaatt   60
agaagaaaga acaggatatg gtggtggttt taatgaaaga gaaaatgttg aatatataga  120

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aagagaagaa tctgatgggtg aatatgatga gtinggacgt aaaacgaaaa aatacnagg 180  
 gaaagcagtt ggtcctgcat ctatattaaa ggaagttgaa gataaagaat cagagggaga 240  
 agaagaggat gaggatgaag atctttctaa atataagtta gatgatgatg aggatgaaga 300  
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 gaaatctaata agacgaagtc gctcanagtc tcatcttca cattcacnat cttcatcacg 420  
 ctcatcctcc cctcaagtt caaggtctaa gtccagggtcc cgttcaagan gttcttccag 480  
 ttcgcantc 489

<210> 3587

<211> 819

<212> DNA

<213> Homo sapiens

<400> 3587

gtcccgggtg gaggcggcgg agccggagcc gggggagggg gcagcggctg tctcacggac 60  
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 gatgggaaaa gattattaca agattcttgg gatcccatcg ggggccaacg aggatgagat 180  
 caagaaagcc taccggaaga tggccttgaa gtaccacca gacaagaata aagaacccaa 240  
 cgctgaggag aagtttaagg agattgcaga ggcctatgat gtgctaagt accccaagaa 300  
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 tggctccagt ggctcctttc actacacctt tcatggggac ccccatgcc cctttgcctc 420  
 cttcttttgt ggctccaacc ccttcgatat cttctttgcc agcagccgct ccactcggcc 480  
 cttcagtggc ttgacccag atgacatgga tgttgatgaa gatgaggacc catttggcgc 540  
 tttcggccgt ttggttca atgggctgag taggggtcca aggcgagccc cagaaccact 600  
 gtaccctcgg cgcaaggtgc aggaccccc agtggtgcac gagctgcggg tgtccctgga 660  
 ggagatctac catggcttca ccaagcgc atgaatcaca aggcgtcgcc ttaaccctga 720  
 tgggccgaac tgtgcgcacc gaggacaaga tccttgcaca tagtcattaa gcgttggtt 780  
 gnaaggaang cacccaagat cacctttccc naagaaagg 819



<210> 3588

<211> 664

<212> DNA

<213> Homo sapiens

<400> 3588

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aaaaaatcac cccgatggcg gctgcgacgc gcggctgccg gccctggggc tcgtcctcg   60
ggctgctcgg gctgggtctcg gccgcggccg ccgcctggga cctggcttcc ctgcgctgca  120
ccttggggcgc cttttgcgaa tgcgacttcc ggcccgaactt gccgggtctg gagtgtgacc  180
tggtctcagca cctggccggc cagcatctgg ccaaggcgct ggtggtgaag gcgctgaagg  240
cctttgtgcg ggacccagcc cccaccaagc cgctggctct ctccctgcac ggctggaccg  300
gcaccggcaa atcctatgtc agtccctgc tggcgacta cctcttccag ggcggcctcc  360
gcagcccccg cgtgcaccac ttttctccg tcctccactt ccccccaccc agccacatcg  420
agcgctacaa gaaggatctg aagagctggg tccaagggaa ctcactgcc tgtggccgct  480
ccctcttctt cttcgatgag atggacaaga tgcccccagg cctgatggaa gtcctgcggc  540
ctttcctggg ctcctcctgg gtggtatacg ggaccaatta ccgcaaagcc atcttcatct  600
tcatcaggtg gggcccggct ttgcagtggg cacaatgcng ggggccactt ttнанaggtt  660
aact                                              664

```

<210> 3589

<211> 816

<212> DNA

<213> Homo sapiens

<400> 3589

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gcgagcctgc gttttccggc cagaggacat gatgcagggg gaggcacacc ctagtgttc   60
ccttattgac agaaccatca agatgagaaa agaaacagag gctaggaaag tggctcttagc  120
ctgggggactc ctaaattgat ctatggctgg aatgatatat actgaaatga ctggaaaatt  180
gattagttca tactacaatg tgacatactg gccctctgg tatattgagc ttgcccttgc  240

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atctctcttc agccttaatg ccttatttga tttttggaga tatttcaa atactgtggc 300  
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 tgtacagact acgcctccac atgatctggc agcaacccaa atccctcccg ctccaccttc 420  
 cccttcaatt cagggtcaga gtgtgttgag ttatagccct tctcgttcgc ccagtaccag 480  
 tcccaagttc accaccagct gtatgactgg ttacagccct cagctgcaag gtctgtcctc 540  
 aggtggcagt ggttcttata gccctggagt gacctactcg cccgtcagtg gttataataa 600  
 ggtaatgact ctcttctctt gnctagtcac attatttttag aattgagagg tatactaaaa 660  
 atcatcta atgagtcaaaac ttatcantga gcaaactgag agttgatttg cccagaacac 720  
 ccatttaaaa acccggaat tgaacatnat atcttaaaca caacatctta aaatggaaag 780  
 agaaaaaatt tgcnttttcc ggagatacca acntta 816

<210> 3590

<211> 828

<212> DNA

<213> Homo sapiens

<400> 3590

ccaagcactt aactttcttt gactgcactg agaattgcta atgatttccc atgagatttg 60  
 cttacttttg tatactgtat tttccagcat tacagaacct tggttattgt tttttagcca 120  
 tagaatcttc tagtaaaaaa tatctgccac catttttagat ttaagcattt gcctatgggg 180  
 agacactgaa tatgtggatg tgtgtattaa tatttggggg ggggacaggg aagggaatgt 240  
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 ttggaaattc aggacattct gactcctaag agttgcccc acccaccatc aaactgaaat 360  
 cagcaccaat ggtgtcagca ctttacagcc catagccaac tttctttatt tttaacgtag 420  
 caaaaaatg tataatagca aggaaaagac atttttaaat tccggttatt tttattgtct 480  
 aaaatgaaag caacagtgtt ttgataaaga tgaaaaagaa aagctactaa attagtaa at 540  
 cagtggttac gtgccctgca gaatttctta acagatgggtg ctgagtgcac gagttacata 600  
 actttctctc taattgaggt tcacaaggcg tcttctaaat tttgctttga caattaattc 660  
 atttctgatg gtaaccaa at agagtgnata tatectactc ccattactgg ctctttcccc 720

ctactatggc ttgnagattt tcaaaagata gaagtctagg caaaactgtn cagttcatta 780  
aaagttggta ggatagtatn tctaaaatca gagatttggg ccctcctt 828

<210> 3591

<211> 769

<212> DNA

<213> Homo sapiens

<400> 3591

ttgtgtgaca actgagggca aagaagggaa aacagaagca aagaaaactg tttcaaaagc 60  
cttgaattg ctactgttaa aaggctgcgg ttcatttctg atttcctcat cttttgctac 120  
aaaggaaaaa gaaatccaat gatgtgtcta cttttgggtga gaagaaaaca cgagcaacag 180  
cagtgtagtt tcgaaagtca ttgtgcagag agggcaggag tgaattaagg ccccggggac 240  
cgcgagcgcc tggccaggag accgcctgaa atatgagccg aacctgtttt gcagaaactg 300  
caggctgttc agaatccaat tctctggata ttggcatgct acattcaatg tccagctaca 360  
ttaagtgtcc atctatcaaa atactagatt tcatggctgg agcaggaaaa gttatgagct 420  
tggaatatct tcagtgcctg aaagtgagga agtgcctcca aaaatatgaa ggcctgtcaa 480  
aaggagagaga acaagaagga ggaggagcta gaaaaagaaa aagcagtggg aactgtcatg 540  
ggatgaatccc agaattgggca tcccagatga catctgtctc cattcctgcc atctcttctt 600  
ggctgccagc cacttagcct ccagggtgtt gtgtctaagg ccaactctct ttcagacta 660  
gaagaaagtg aggcagctca ctttttcatt tangtttact ttggaaagtt ctgtggttga 720  
atatcaacat agtgactgat ttgnggctt gtaaagcttg tacagctna 769

<210> 3592

<211> 789

<212> DNA

<213> Homo sapiens

<400> 3592

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 gtcggcgata tggaagatgg gcagctttcc gactcggatt ccgacatgac ggtcgcaccc 120  
 agcgacaggc cgctgcaatt gccaaaagtg ctaggtggcg acagtgctat gagggccttc 180  
 cagaacacgg caactgcatg tgcaccagta tcacattatc gagctgttga aagtgtggat 240  
 tcaagtgaag aaagtttttc tgattcagat gatgatagct gtctttggaa acgcaaacga 300  
 cagaaatgtt ttaaccctcc tcccaaacca gagccttttc agtttggcca gagcagtcag 360  
 aaaccacctg ttgctggagg aaagaagatt aacaacatat ggggtgctgt gctgcaggaa 420  
 cagaatcaag atgcagtggc cactgaactt ggtatcttgg gaatggaggc cactattgac 480  
 agaagcagac aatccgagac ctacaattat ttgcttgcca agaaacttag gaaggaatct 540  
 caagagcata caaaagatct agacaaggaa ctagatgaat atatgcatgg tggcaaaaaa 600  
 atgggatcaa aggaagagga aaatgggcaa ggtcatctca aaaggaaacg acctgtcaaa 660  
 gacaggctag ggaacagacc agaaatgaac tataaaggtc gatacgagat cacagcggaa 720  
 gattctcaag aaaaagtggc tgatgaaatt cantcagggt acaggaccaa naaagactga 780  
 tanccagat 789

<210> 3593

<211> 719

<212> DNA

<213> Homo sapiens

<400> 3593

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 cttgacagga ccctagctca taaacatttc ttcagaacta tacttcaaat gggatgcttt 120  
 gtattaaaac ttttaataaat ttaatttatt ttttcttttg aatataaata actgagctta 180  
 agcattatca tcatatcgat ttcttatgct gcctaaacct cttaatttta gtcgaaatat 240  
 atcttttttt ttttttggag gcggaatttc attcttgttg cccaggctgg agtgcaatgg 300  
 cacggtctcg gcttaccgca acctccgcct cccgggttca ggcggttctc ctgcctcgga 360  
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 gtagggacag ggtttctcca tgttggtcag gttgctctca aactcccaac ctgaggtgat 480

ctgcccgcct cggccctccca aagtgcctggg attactgagc cactgtgccc agcccaaaat 540  
gtatcttata caaacattgt anaaatgaat aatgattact caaataagat cttttaatta 600  
taagcttctg gcatctctat tttccctta agtaggggat actaaagnga atgattttct 660  
aagaggatct tttgaaactc tttagncaat attngagtaa aataaattat tgggggatc 719

<210> 3594

<211> 841

<212> DNA

<213> Homo sapiens

<400> 3594

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cccgagtga cgtgtggaga agcggcggca caagcgcggc ggcgggagac actcccgc 120  
ccaccagact caagccctca ctcgactctc gcggccttcg ttgctcgac agctccctgc 180  
ccaggctagg aggccggctt gcgggggtga gtggcccag ctaagggtgc ggagacctaa 240  
gggcggcgac tacgacggcg ttgatatcgg tggtaacgac ggccctcagca ggcggggaag 300  
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agattgaatc aggtcatctt tccagtcagc tacaatgaca agttctacaa ggatgtgctg 420  
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tgtaggggtgg atcattcaca gaatcagaag agactttaca tcatgacact aggatgtctg 540  
gcaccttacc gaaggctagg aataggaact aaaatgttaa atcatgtctt aaacatctgt 600  
gaaaaagatg gtacttttga caacatttat ctgcatgtcc agatcagcaa tgagtcggca 660  
attgacttct acaggaagtt tggctttgag attattgaga caaagaagac tactatnaga 720  
ggatagagcc cgcagatgct catgtgctgc agaaaaacct caaagttcct tctggtcana 780  
atgcaatgtg caaaagacag acaactggac aaattacaaa tgaactttnt tgccttgctt 840  
g 841

<210> 3595

<211> 826

<212> DNA

<213> Homo sapiens

<400> 3595

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gtcttaggaa cctaggaaat aactcgggaac ctgtaacgtc ccactggttt ggacatatc   120
ctctcctgat ctggcctcat ctgttccagg gaggtgggat tgaaacatat gcagtaatgt   180
cacctcaaaa gagagttaag aacgtccagg caaaaacag gacttcacaa ggtagtagta   240
gttttcagac cacgctttca gcctggaaag taaaacagga tccaagcaac tcgaagaaca   300
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aagaagatgc tttgcaaatg gcagtgggat attttgagaa aggtcccatt aaagcttcac   420
agaataaaga taaaaccttg gaaaaacact tgaaaactgt ggaaaatgtg gcttggaga   480
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gaaatgctgt aaacacacgg atattgaagt gcatgatccc agcaacagta atatcagaag   600
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tactttttta tcgntggctg gntgcaatgt ttgacttcat tgatcgtaag gagcaaatta   720
acttgctcta tggcttcttt tttgcttcat tgcaggatga tgcactgngc cttatgttt   780
ggcatttggt atattacttc caaaaaagag aatgtnaanc ctttcg                       826

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<210> 3596

<211> 781

<212> DNA

<213> Homo sapiens

<400> 3596

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agggtcaciaa gggagatgtc cgccccagc cgtagcctcg gacggtttct gagcgttggt   60
gtttggcacg cgccaccctc tcttgctttg gttccgccat gccgatgtac caggtaaaac   120
cttatcacgg gcgcggcgcg cctctccgtg tggagcttcc cacctgcatg taccggctct   180
ctaactgca aggcaggagc ggcgggcccag cgccggcggt tggccaccta cagtctttgg   240

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tagatgagtg gctggatagc tacaagcaag accaggatgc aggatttctg gagcttgtta 300  
actttttcat ctgatcttgt ggatgtaaag gactcggggg actatcctct gacagctcca 360  
ggtctatcct ggaagaagtt ccagggcagc ttctgtgagt ttgtggggac attggtctgt 420  
cggtgccagt acatcctcct ccatgatgac ttccctatgg acaacctcat ctccctgctc 480  
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aaactgatga cctccctggg aagagttgcc ctccaactga gtctgcacca agatatcaat 600  
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gagaagcctg ttggagaaac acaaagagct gcattaatac tacattgtca aagacaaaga 720  
cgaacatgag acatgcgata tgagttttaa aaggagagaa gagcnnaaaa accattcagn 780  
t 781

<210> 3597

<211> 759

<212> DNA

<213> Homo sapiens

<400> 3597

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ggcttgtttg tctcctcctc ctccctgctc ccttgctcag agttcctgcc tccagctgcc 120  
aggggggaca gccagccagc agcaggaggg gggctagaga gctgaaggag agccagtttc 180  
cccaaaattg gacttctcag aacctttaat atgctaattg gcatttgtga tctccaagag 240  
ggggatatga tatgcagcat tcttgaatac ttctaatac agggagccca ctacctcata 300  
agctgcagtg agaagaggag tttgttactt taaacagagg ctgaagaaac tatagaatta 360  
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ggaaattcag gttcaccaga aactggttgc tcaaatgaag caggatccac agaattgctga 480  
cttaaagaaa cagcttcatg aactccaagc caaaatcaca gctttgagtg agaaacagaa 540  
aagagtagtt gaacagctac ggaagaacct gatagtnaag caagaacaac cggacaagtt 600  
ccaaatacag ccattgccac aatctgaaaa caaactacaa acagcacagc agcaaccact 660  
acagcaacta caacaacagc agcagtagca ccaccnccac gccagcagc cagctgcagc 720

ctnttnccaa cctgactgct tacagaagac tgtaactac

759

<210> 3598

<211> 357

<212> DNA

<213> Homo sapiens

<400> 3598

agccgccaca ctttcccaag cccgcaggcg ccccccccaa caccagcgct gcacccccga 60  
 cccattcccc gcgggcccct ccaggagaaa aaatgaaacc agactggccg aggagggggg 120  
 cggcagggac caggggtgcg agcagaggtg agggagacgg gacttacttt gcgaggctcg 180  
 gtgcaggggcg ccgccgacga gaaataaagg ccccgatacg ggctgcctgg agccccccga 240  
 gcgcagcaat gtcagggtc cagtccgggc ggcgttggcg gncgcagggg acggggacgg 300  
 gcgcgcgtgc ngcgggcgct ctcgctgcgc tccggctcgg gccccggntc cgcgcgg 357

<210> 3599

<211> 659

<212> DNA

<213> Homo sapiens

<400> 3599

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ccctcggcaa gatgccactt tagatgagga agaggacatg gtgatcattt ataacagagt 600  
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<210> 3600

<211> 778

<212> DNA

<213> Homo sapiens

<400> 3600

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tgcaactggt ctggatagat agcttacagc agtagtgggc tctggaatgc ccaaaggga 720  
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<210> 3601

<211> 767

<212> DNA

<213> Homo sapiens

<400> 3601

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gacaacttga cttgtgctgc caaaacttga tangaaacat taccggggg aaaaccactt 720
gcttttcctt ggttinctaat cagggtggga aanactggta aattttt 767

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<210> 3602

<211> 714

<212> DNA

<213> Homo sapiens

<400> 3602

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tgcatTTggt tcaactgtatc gagatgatgt cttgataaag ccagtcgag ttgttgccat 180
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gaatgttgaa ctttttaaag aactcagtat aaatgtcatg aaacagctca ttggttcac 420
taacttattt gtgatgcaag tggagatgga tatatacact gctctaaaaa agtggatggt 480

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ccttcaactt gtgccttctt ggaatggatc tttaaaacag cttttgacag acacagatgt 540  
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<210> 3603

<211> 712

<212> DNA

<213> Homo sapiens

<400> 3603

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 aggctaccat gcaagtctga accgggctct acgcaccttc ctctctgctg agttaaacct 180  
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 gtttgagttt cagccccaca tgggggatat ggcttcccag ctctgtgccc agcagcctgt 360  
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 gactgtcgag gactttgatg tgtctgactg cttccagtac agcaactcca tggagtccgt 540  
 caagtccacg gtctctgaaa ccttcatgag caagcccagc attgctaaga ggagagccaa 600  
 ccagcaagag acagagcagt tttatttcac aaaaatgaaa gagtcctgga nggcaggaac 660  
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<210> 3604

<211> 732

<212> DNA

<213> Homo sapiens

<400> 3604

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tccagtcatt ccaaataaag agatgcctgg acaaaaacaa gcttatggat gctctaaaac  180
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<210> 3605

<211> 744

<212> DNA

<213> Homo sapiens

<400> 3605

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<210> 3606

<211> 833

<212> DNA

<213> Homo sapiens

<400> 3606

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 gcaaacagct gcagatgaag tcagagagaa acttgggtca tcatgcaaaa tcagcagaga 540  
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 ttaaaagtgt ggaaaattaa tgccagtttt aaaaagaaaa aagcaagcgc aaaaagatna 780  
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<210> 3607

<211> 823

<212> DNA

<213> Homo sapiens

<400> 3607

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<210> 3608

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3608

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tgtctggcct acttccagga ctctgaagaa acagttacaa gcaggatgct tttcccaacc  180
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 catnctggga cctcttn 737

<210> 3609

<211> 832

<212> DNA

<213> Homo sapiens

<400> 3609

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 caagcgacgc cccacctgcc ccgagctcac cttttcttt cgcgctggct gcagctgacc 180  
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aaccttctta tggattggat tgaggttcan atcaacaacc agggaaatat tt 832

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<211> 836

<212> DNA

<213> Homo sapiens

<400> 3610

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 ttccccaacc tcttttncac tggtaatttc ttttcatgca ggcagaatat aggggtgcca 780  
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<210> 3611

<211> 797

<212> DNA

<213> Homo sapiens

<400> 3611



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<210> 3612

<211> 686

<212> DNA

<213> Homo sapiens

<400> 3612

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<210> 3613

<211> 792

<212> DNA

<213> Homo sapiens

<400> 3613

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<210> 3614

<211> 715

<212> DNA

<213> Homo sapiens

<400> 3614

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<210> 3615

<211> 733

<212> DNA

<213> Homo sapiens

<400> 3615

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 cagagggcaa gtcactccct tcttcacca gttcaccatc cccacctgcc ttcagaaaagt 660  
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<210> 3616

<211> 860

<212> DNA

<213> Homo sapiens

<400> 3616

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 gaccaccagc catgaagtca ctcttacta ggatgttttg ttgtaaaagt tgtccaaaca 240  
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 ttgcaatggc tttattaaga gatgttcata atctttgtcc taaagaagtc ttaacattta 360  
 ttttagactt aatcaagtac aatgacaaca ggaaaaataa gttttcagat aactattatc 420  
 gtgcagaaat gattgatgcc ctggccaact ctgttacacc tgcagtcagt gtgaataatg 480  
 aagttagaac tttggataac ttaaatacctg atgtgcgact cattcttgaa gaaatcacca 540  
 gatttttgaa tatggaaaaa cttcttccga gttacaggca taccatcact gtcagttggt 600  
 tgagagccat acgggtactt cagaagaacg gacatgtgcc aagtgatcca gctcttttta 660  
 aatcttatgc tgaatatggc cactttgtgg acattaggat agcagctttg gaagcagttg 720  
 gtgattatac taaagtgggc cagaagtat gaagaactgc aattggctac ttaatatgat 780  
 tcaanaatga ccctgtaccc tatggtaagg cntaagatct tnaacatggt ggacttagaa 840  
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<210> 3617

<211> 712

<212> DNA

<213> Homo sapiens

<400> 3617

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gtgcaatttg tagaggctgc agcacacgag agtgaacagc agaaagaggc ttcttggaaa   60
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caacagcttc gtgcctggga ggctgaaaaa tacaatgaga ttcgaacca ggaacaaaac  180
atccagcacc taaaccatag tctgagtcac aaggagcagt tgcttcagga atttcgggag  240
ctcctacagt atcgagataa ctcagacaaa acccttgaag caaatgaaat gttgcttgag  300
aaacttcgcc agcgaatacg tgataaagct gttgctctgg agcgggctat agatgaaaaa  360
ttctctgctc tagaagagaa agaaaaagaa ctgcgccagc ttcgtcttgc tgtgagagag  420
cgagatcatg acctagagag actgcgcgat gtcctctcct ccaatgaagc tactatgcaa  480
actatggaga gtctcctgag ggccaaaggc ctggaagtgg aacagttatc tactacctgt  540
caaacctcc agtggctgaa agaagaaatg gaaaccaa attagccgttg gcagaaggaa  600
caagagagta tcattcagca gttacagacg tctcttcatg ataggaacaa agaagtggag  660
gatcttaatg caacattgct ctgcaacttg gccaggcana atgagatacn na           712

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<210> 3618

<211> 813

<212> DNA

<213> Homo sapiens

<400> 3618

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gttttggcgt tcagttatat ttcacaacca ccttgattat ttagctaaaa atggttatga   60
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gcttgcgctt tcttgtaaac tggagcgaga attccgttgt gtggaacttg ctgatcta at  180
gactcaaaat gctgtgaatt tagccattaa atatgcttct cgctctcgga aattaatact  240

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ggctcaaaaa ctaagtgaac tggctgtaga gaaggcagcc gaattgacag caaccaggt 300  
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 tgctacagag tggagccaac caaggttcag aaatcaagtt gaagaagatg ctgaggacag 420  
 tggagaagct gatgatgaag aaaaaccaga aatacataag cctggacaga actcgttttc 480  
 caaaagtaca aattcctctg atgtttcagc taagtcaggt gcagttacct ttagcagcca 540  
 aggacgagta aatcccttta aggtatcagc cagttccaaa gaaccagcca tgtcaatgaa 600  
 ttcagcacgt tcaactaata ttttagacaa tatgggcaaa tcatncaaga aatccctgca 660  
 cttagtcgaa ctacaaataa tgaaaagtct nccattataa gcctctgttc caaagccgaa 720  
 cctaacagca tntgcagcat ctattcagaa agaatctaac tataactgng agtgaagaag 780  
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<210> 3619

<211> 628

<212> DNA

<213> Homo sapiens

<400> 3619

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 tgcctgtgcg ggcctcgtcc ccgcgccag ccctcgggtc tgcctccgac agcgccgcgc 180  
 tctctcagcc gccccctgc ccctcgggcc cccctctctg ctgcccctgg cgccatggcg 240  
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 gaggcgcagg gcgcccgcga ctgccccgag tgccggcgca cgctcgccga gccgcgcgtg 420  
 gcgcccagcc tcaagctggc caacatcgtg gagcgctaca gctccttccc gctggacgcc 480  
 atcctcaacg cgcgcgcgcgc cgcgcgaccc tgccaggcgc acgacaaggt caaagctcct 540  
 ctgctcacgg accngcgct tctctgcttc ttctgcgacg aagcctgcac tgcacgagca 600  
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<210> 3620

<211> 668

<212> DNA

<213> Homo sapiens

<400> 3620

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tgaggcaagc gcctcaggag tgcgtgaggc ccacgcagaa ctcggggagc cttttatcct   60
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tgcagcaggt gttccaggca cctcgccggc ctggcattgg cactgtgggg aaaccaatca  180
agctcctggc caattacttt gaggtggaca tccctaagat cgacgtgtac cactacgagg  240
tgacatcaa gccggataag tgtccccgta gagtcaaccg ggaagtgggtg gaatacatgg  300
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tgcaagccct ggatgtggcc atgaggcacc tggcatccat gaggtacacc cctgtgggcc  600
gtccttcttc tncggctga gggctactac caccgcttg ggggtggccc cangtctggn  660
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<210> 3621

<211> 629

<212> DNA

<213> Homo sapiens

<400> 3621

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ntccagcgtc tgccgcggct ccgagggggt ggggctgctg ggaatggctg tgcccccttc   60
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atggggcatg gaggagaagg cggcggccag cgccagctgc cgggagccgc cgggcccccc  180
gagggccgcc gccgtcgcgt acttcggcat ttccgtggac ccggacgaca tccttcccgg  240

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ggccctgcgc ctcattccagg agctgcggcc gcatttgaaa cccgagcaag ttcggacca 300  
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 ggactgcgtg ctggtccggg tgtatgggga gcggacggag ctgctggtgg accgggagaa 420  
 tgaggtcaga aacttccagc tgctgcgagc acacagctgt gccccaaac tctactgcac 480  
 cttccagaat gggctgtgct atgagtacat gcagggtgtg gccctggagc ctgagcacat 540  
 ccgtgagccc cggtttttca ggttaatcgc cttanaaatg gcaaagattc atactatcca 600  
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<210> 3622

<211> 700

<212> DNA

<213> Homo sapiens

<400> 3622

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 gtgctgcaca cctgggtttc cttgcctaga gctgtgtgtt cggggtcctt tgggtccagtc 180  
 ggaggctgcg gagcggcggg ggttgcctgc gctgtccgcc cgggcatcct cccggtgatg 240  
 gaagcagccg ccgccgccgc tgcggggtcg cgctgtgccc cattcaccgc tgccagagag 300  
 gtgggaaaat tcgccgcacg gaggccgaaa gcgagagggg ctgcgccgct atgccgggag 360  
 ctgagtccca tataagccgc ccccagccat cggccccagc cggttctggt cccctgagcg 420  
 agacaggaag ctgcggtccc gagaaagcgg aggagacgtc gctggagccg ggaggcggcg 480  
 ggttcggcgg agcgcggagc ggggctctgg gccgcgtgaa agtttttctt cccgagccgc 540  
 agggcgcccc ctgcccggaa actgcccagg gataagtcgg ccgacttccc agaccctcgc 600  
 aaggtgcggg gacccccagc ggaagcgaga gggaaccgaa aatcgangaa cgagttgaca 660  
 gcccggacag tncgccccng gccggtgatc ccggggcccc 700

<210> 3623

<211> 848



<212> DNA

<213> Homo sapiens

<400> 3623

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agagtggcgc ggggggcgtg gggcgggtgct gaggagctga agccgtggcc agctcgacgc   60
cggacagtcc agcgagcagc acggcgggaa ccggcagccg gagcagtccc ggagcagaag   120
cagcagcagc agcagcagcc ctgccggttc gcggagcgca gccgagccgg ccatggcggt   180
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caaggctggc agtgatgggt aaagcatagg aaactgcccc tttcccaga ggctcttcat   300
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gtacttaaag ctttcaccaa aacaccaga atcaaatact gctggaatgg acatctttgc   540
caaattctct gcatatatca agaattcaag gccagaggct aatgaagcac tggagagggg   600
tctcctgaaa accctgcaga aactggatga atatctgaat tctcctctcc ctgatgaaat   660
tgatgaaaat agtatggagg acataaagtt ttctacacgt aaatttctgg atggcaatga   720
aatgacatta gctgattgca acctgctgcc aaactgnata ttgtcnaggt ggtggncaaa   780
aaaatatcgc aacttttgat atttccaaa gaaatgactg gcactctggag atcctaacta   840
atgcatac                                     848
    
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<210> 3624

<211> 479

<212> DNA

<213> Homo sapiens

<400> 3624

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ggtttatcct aaattactca accccttgta gccttgacaa attttacctt aaaaccaaen   60
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cttccttttt caatagtaat atttaaacc acccttgacc aattgtttgc ccaaatatc   180
    
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ttgtcatttg gagtcagtgg aaaatccagc acaccaagca ccagtcttct tctgaggcaa 240  
aagaaaagtg ttgtcatttt cactctgttg gagctgcaca ctttttttct ttttcttttt 300  
ttttttttgt cngntaagaa ggatgctggc cagagctgca naaaatatga ggcaattaaa 360  
agtcttttagc tgtttagcaaa cctgttagtt ttacttctgc nttgaaccag cctcagaagc 420  
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<210> 3625

<211> 750

<212> DNA

<213> Homo sapiens

<400> 3625

ttttagattt tgaaatttag ggataatagc tcttaggttt gggtaccact ttgctgcagt 60  
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ttttctagtc atcatatcac acacctttac gacagctcac tgaaggaagg tgatactgtt 180  
cccatTTTgt agatggaata gacaaaacct gaatttaagt agcttgctca aggttccata 240  
ttgaatatgg aaagttcaaa tcatctcagt aatgaatata ccatatatac ttgctgtatt 300  
gtatctatga taattcagtt acccacaata cctttttaaa tttctgttaa tgacataacct 360  
ttaaatgtct ccttgatgaa cagaatcatg gtcttttaaaa acattttcat gggttgattg 420  
cattttcaag ctctaaagga ttgaaagata aatcttcacg ttaaaggatga gagtgaagta 480  
tctgctcttg ggttacagaa ccagatagta ctagaactaa gattacaggg taaagctgct 540  
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aggcttgga tgcantggca tgatctcagc tcacggcagc ctctgcctct tgggctcaag 660  
cgattctcct gcttcagctt tccaagtatt tgggaccaca ggcgccacca caggcctggc 720  
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<210> 3626

<211> 879

<212> DNA

<213> Homo sapiens

<400> 3626

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agcatcgagt cggccttgtt gcggaacgga accactgggc cgcagcgacc acaggggagt 60
tcttcgccgg ccgcaggttc aaagcgatct gcaatgagcg cctttaggaa ttcattcgaa 120
ggcgcaaaag aaaaagaaat taaggcagga actgagcgag gaaggaaggg agggaaagaa 180
aggaagaaag agaaaaagag aaagaaacag aaagaacagg caaaagctga aagggtcatg 240
ggaggaggct gctggttcca gtgaatggcg ctgacccac tgagatcaac accttgctgg 300
aggcctcaaa cactgaaaga aagacatgca aaggaaataa ttcaggacca actggtgggc 360
tccaaaaatc tcttctatga ggaaggtgaa tgcaggctct gctacgtcct gcctgtgaaa 420
gaatcccttc aggaaaccag agcttccctc gtttaccttt tctcctacaa agggaagcag 480
cctggaagaa agagtccagt acttgacca tgcctcaaca aactctgcta tcaatatggt 540
gcagcttacc aaaggctccta gaactttgtc aacgcacttg gagtaatfff tatgaaatat 600
tgtgtgtgat aagcaaactg tggaaattta tataagatgt tgggtggcata gagttatacg 660
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cctttttatg aganaaagtc ccatgagaaa aaaactttct tatattggga agctncttct 780
aataggggga tgggccatft aatggccttc cacttaagat gggggtaata nccccggggg 840
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<210> 3627

<211> 703

<212> DNA

<213> Homo sapiens

<400> 3627

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aggtctgagg gagcgatggc ggtacgcgcg ttgaagctgc tgaccacact gctggctgtc 60
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gatctgtctt tcgccgaggg gaccgcagcc tacgcgcgcg gggactggcc cggggtggtc 180
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cgacccaggt gtgccgncga cttcccgtgg gagctggacc ccgactggtc cccagccccg 300  
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 cgcgctgcct gcctgcgccg ctgcctcggg ccgncggccg nccactcgct cagcgaagag 420  
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 cacatggaaa tgcagcagaa cctagactat taccaaacca tgtctggagt gaangaggcc 600  
 gacttcaagg atcttgagac tcaaccccat atgccaagaa tttcgactgg gagtgcgact 660  
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<210> 3628

<211> 720

<212> DNA

<213> Homo sapiens

<400> 3628

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 agtccctatt tatttgaaat ctttaatagt gatagtgatc ctcatggaat ttctcacgtt 180  
 aaatttgatg atctcaatcc agaagctgtt gaagtcttgt tgaattatgc ctacactgct 240  
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 tgcattcttt accgaaattt tgcaagtngt atgggagact cccgtttgtt gaataagggt 420  
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 ccaaggctaa agttggaggt aatgcttgaa gataatgttt gcttgcccag caatggcaaa 540  
 ttatatacaa aggtaatcaa ctgggtgcag ccgtagcatc tgggagaatg gagacaatct 600  
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<210> 3629

<211> 847

<212> DNA

<213> Homo sapiens

<400> 3629

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aggatgctgc atttggacct aatatgaatc gacaatttgg attgttgaac ttgaaggctt  180
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tggacttttt gacatgaatt ttactacttc acaaatgaag aatgatgnta tgaagtaccg  780
tggcgaagtt gacaatccct aaaatgatat gattaaaagt acttcttctg tgtctatcgg  840
taatggn                                           847
    
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<210> 3630

<211> 773

<212> DNA

<213> Homo sapiens

<400> 3630

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ccaccgcttc cagtgcgaag ggccagtgga catcaacatt gtggccaaat gcaatgcctg  120
    
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cctctccagc ccgtgcaaga ataacgggac atgcacccag gaccctgtgg agctgtaccg 180  
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 tgaggacaac gactgcgaaa acaatgccac ctgcgtggac gggatcaaca actacgtgtg 420  
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 tgagctgaac ctctgtcagc atgaggccaa gtgcatcccc ctggacaaag gattcagctg 540  
 cgagtgtgtc cctggctaca gcgggaagct ctgtgagaca gacaatgatg actgtgtggc 600  
 ccacaagtgc cggcacgggg cccagtgcgt ggacacaatc aatggctaca catgcgcctg 660  
 cccccagggc ttcantggac ctttctgtga acacccccca cccatgggtcc tactgnagac 720  
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<210> 3631

<211> 834

<212> DNA

<213> Homo sapiens

<400> 3631

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 gctgtggacg gcgttggggg aggcctgacg agattaataa agaactcttc agaattcctg 180  
 gtgtttcatc atatatacga ctaagatata aactcttcta gcttgcgtgt tctggaccaa 240  
 aaaaaatgac gtctattatc aaattaacta ccttttctgg ggtccaagaa gaatctgccc 300  
 ttgtctatct tctccaagtt gatgagtta gatttttatt ggactgtggc tgggatgagc 360  
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 atgatcttta tcagtctcga cacaatacag aagattttac actctttaca ttagatgatg 600  
 tggatgcagc ctttgataaa atacagcagc taaaattctc tcagattgtg aatttgaaag 660

gtaaaggaca tggcctgtct atcacacctc tgccagctgg tcatatgata ggtgggaaca 720  
 atatggaaaa tagtcaaaga tggagaagaa gaaattgggt atgcagttga ctttaaccnc 780  
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<210> 3632

<211> 773

<212> DNA

<213> Homo sapiens

<400> 3632

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 accgcccgcg ccacagcacc cgcagccggg gtcccaggcg ctcccagccc ccgcgctggc 180  
 tccggaccag ctgcctcaaa acaacacgct tgtggcgctg cccatcgtag ccatcgagaa 240  
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 gattgggtcca attttaaaga ggaaattacc aggatcagat gtttctggaa gactcatggg 720  
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<210> 3633

<211> 780

<212> DNA

<213> Homo sapiens

<400> 3633

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 cccaagaacc aggaaggttc ttaaagaagt caggggtgcag gatgagaaca acgtttgttt 180  
 tgagtgtggc gcgttcaatc ctcatgtgggt cagtgtgacc tacggcatct ggatctgcct 240  
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 cgtgggggttt gggaacacgc caccgctnag aagaaagaag atgacttnt taacaacgcc 720  
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<210> 3634

<211> 765

<212> DNA

<213> Homo sapiens

<400> 3634

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 aagagtcctc cattttttgc accccctcac cgccaactct gttattcagt agagagaagt 480



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 aggatgtcag gtgagactgt gtatgcaaaa tgaatggcac angtgatgcc agggcctctt 720  
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<210> 3635

<211> 782

<212> DNA

<213> Homo sapiens

<400> 3635

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 aaagagcgtt ttcgctacgt aaagcacatt cgataaagga tatggaaaat actttgcagc 180  
 tggtgagaaa tatcatacct cctctgtctt ccacaaagca caaagggcaa gatggaagaa 240  
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 ctgtgtctaa aggccctatg gacagcgatg acagccatgg atctngcta agactcagcc 720  
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<210> 3636

<211> 888

<212> DNA

<213> Homo sapiens

<400> 3636

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ggtatgacca tcaagggcag caaagtccag gtttccttct gtgctcctgg agcgccaggg  180
cgaagtacat tagcagcatt gatagcggct caacgtgtga tgcacagtaa tcaaaagggc  240
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<210> 3637

<211> 676

<212> DNA

<213> Homo sapiens

<400> 3637

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aagtcgcctt gaagaaattg cagaacttgt ggcacatctt ttaccttcac ctcttcgtcg  180

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tgaaaaactt gcactggcac tagaaaatga gggttatatt aaaaagctcc tggagctttt 240  
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 gaaacaaaaa attcatcaag acatacagag ttcagtatat acaagatatg gttctaccaa 540  
 ctcttctggt ctttgaagaa aacatgttat caacacttca ctcttttata tttttcaata 600  
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<210> 3638

<211> 786

<212> DNA

<213> Homo sapiens

<400> 3638

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 aaataacagg ttaacaggca gttgtttact tnggggtttg ctgcactatt gcaatttcna 720  
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ggtaat

786

<210> 3639

<211> 827

<212> DNA

<213> Homo sapiens

<400> 3639

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gctgcatcgc actcttcaac caggagctgg tgtctggctc tgagctcctg cagctcgtca 180
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anaaccctgt caccggttgn ccccgttgtc ctgaaaagac tgaagggccca aggaaaaaga 780
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<210> 3640

<211> 786

<212> DNA

<213> Homo sapiens

<400> 3640

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<210> 3641

<211> 751

<212> DNA

<213> Homo sapiens

<400> 3641

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 agctctggcc tagaggggca ggatgtagca gcatctggga ggggtaggtg gaggagcttc 660  
 gccaaaggcat cctttcctca ggaggcaatg tgcancctca gctcagggtcc ctggaagcan 720  
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<210> 3642

<211> 865

<212> DNA

<213> Homo sapiens

<400> 3642

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 agtgcttatg tattttatat ctgtttcaca tactccttat atatcccca cagaaatggg 420  
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 ggtgnatcct cagcacttca catgggtgcct gtcacataaa tatttggtta atgacttctt 780  
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<210> 3643

<211> 818

<212> DNA

<213> Homo sapiens

<400> 3643

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agacatggaa ctggccccctt tccgaatttc ttcaaaagnc ttttacgaat ggtcttgcag 780
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<210> 3644

<211> 773

<212> DNA

<213> Homo sapiens

<400> 3644

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<210> 3645

<211> 872

<212> DNA

<213> Homo sapiens

<400> 3645

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gccattggtc ccatcattct tgtgggggaa aaattctagt attttgatta tttgaatctt 780  
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<210> 3646

<211> 523

<212> DNA

<213> Homo sapiens

<400> 3646

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<210> 3647

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3647

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aaccgaatcc ggattctcat tgagaatgga gtagctgagc ggcaaagatc tctccttggt 180

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<210> 3648

<211> 861

<212> DNA

<213> Homo sapiens

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 tctctgaaaa caggttggaag agacttcctg aagaaatcag tggcctgact tcattaacgg 720

atttagtcat ttcccagaac ttattagaaa cgattccgga tggattggaa aactaaagaa 780  
ctgncaatct tgaaggngga tcagaataga cttacacagt tgnctgaagc agttggggga 840  
tgtgaaagtc ttactgggtt a 861

<210> 3649

<211> 830

<212> DNA

<213> Homo sapiens

<400> 3649

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agtgctcgcc ccggtccgac ccccggtttc cgggacactt gggttgcgga ggccggctgg 180  
ccggagtcac gggttggggac gggcgcgccct cggagcgcac ggctgcgctg gaagccgcgt 240  
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tctcctcagc ggtttagtgg agaaaagcag agagctcttc ctggggcgaa tgggacctcc 480  
tccctcggtc ctccgtggag tcgtcgcatc gcttgtcgtg ttggtctcga ggggctcaca 540  
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gtcgccggac ctgcgggaat ccagcgctta ttcgtgacc ctcgagtcgc ttcgctagct 720  
gtgcgcctct gggcactacc tggaaggagc tgcaaccn tcttgaggat ncgtcttagg 780  
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<210> 3650

<211> 689

<212> DNA

<213> Homo sapiens

<400> 3650

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 tcatggcctg tgagagccac acccctaggc cccgtctcct agtctgcagg ccgcaggacc 180  
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 caccaggcgc ggcgatcaga tcgggtggtg tgggtgcctcc tgggactgac cacttcttgc 360  
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 gaattgcgtc tgctccagga atgcatccta gcgtgtgtac gatcgcgcct ggggtgtcctg 540  
 ttctcatgag caagcgggtt taaccagcag cataatttat actcatagac aggactgggg 600  
 gaanggctgt tcctgangct ggggtgcagt gccttggaaa gcaccctga aacagtggac 660  
 cttgnatttt taagtgtccc tgcaaccat 689

<210> 3651

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3651

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 ctggaaaaaa tcctggccgt ttgtcatggg gtcatgtata aacagctctc agcctggatg 180  
 ctccatggac tcctcttggc ccagcatgaa gaattcttta tcaaacaggg gccatcttct 240  
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 ccatctctga agcagttttc cctacgagtg gagattttgc catcctacat tccagtggag 420  
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 attcgagca ctgtggctga gcatctctgg aagtTgatgg tagaagaatc cgatttactg 660  
 ggtcanctga agatcattaa agactTTttac cttctTggga cgtgganaac tggTtcangc 720  
 cttcatttga cacagtt 737

<210> 3652

<211> 733

<212> DNA

<213> Homo sapiens

<400> 3652

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 aaccgcctcc cgctcctagc aggtTgctac tgccccgaac ccgcgctgca gggaacagcg 120  
 gggcaaacag tgagtggggT tcagcgtaga ctctggacca ggagaggccc gcggtgaccg 180  
 aggcctgggc cccggaaacc aatagagcca tggcgactcc ctctgctgcc ttcgaggccc 240  
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 ttattggaga ggcttcatTT cctgtgatgg tgaatgacat gggccaggTc ctcattgctg 360  
 cctcctccta tggccgtggc cgcctggtgg tcgtgtccca tgaggactac ttggtggaag 420  
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 ccattggTgt acaccatcc ctggcacctt tggccaaaat cctcgagggc tctggagtgg 540  
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 atgaaacat gacagaaaag ctggtcaagt tcatgaaatg tggTggcggc ttgctcatag 660  
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<210> 3653

<211> 654

<212> DNA

<213> Homo sapiens

<400> 3653

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agtgctgcgg ctgcctagtt gacgcaccca ttgagtcgct ggcttctttg cagcgcttca   60
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ggagccgcgg acagagacgc gtgcgcaatt cggagccgac tctgggtgcg gactgtggga   180
gctgactctg ggtagccggc tgcgcgtggc tggggaggcg aggccggacg cacctctgtt   240
tgggggtcct cagagattaa tgattcatca aggatagtt gtacttgtct cgtgggaatc   300
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cagggaatcc tcagtgttc tctctccgaa ctgaacaggg gacggtgctc attggttcag   420
aacatggcct gatagaagta gaccctgtct caagagaagt gaaaaatgaa gtttctttgg   480
tggcagaagg ttttctccca gaggatggaa gtggccgcat tgttggtgtt caggacttgc   540
tggatcanga gtcagtgtgt gtggccacag cctctggaga cgtcatactc tgcagnctna   600
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<210> 3654

<211> 860

<212> DNA

<213> Homo sapiens

<400> 3654

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atgcggtccc gggttctgtg gggcgccgcc cggtaggtctt ggccccgccg ggccgttggc   60
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gggccccttgc ggaccttcct cgagcgccag gcggggtctg aagcccattt gaaggtcagg   180
aggccccgagt tgctggcggt gatcaaactg ctgaacgaga aggagcagga gctgcgggag   240
actgagcact tgctgcacga tgagaatgaa gatttaagga aacttgcaga gaatgaaatc   300
actttgtgtc aaaaagaaat aactcagctg aagcatcana agaaacagat gaaaatgatt   360
tgatcctgga agtaactgca ggagttggag gtcangaggc aatgttgttt acatcagaga   420
tatttgatat gtatcagcaa tatgtgcat ttaaaagatg gcattttgaa accctggaat   480

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attttccaag tgaactangt ggccttagac atgcatctgc cagcattggg gggttcagaag 540  
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 anaagcangg ccgcgtccat actagcacca tgactgtagc antattaccc cagcctactg 660  
 agattaatct ggtgattaat ccgaaagatt tgagaattga cactaagcga gccagtggac 720  
 tgggggggca gcatgtaaat ccacggacag tgcttgtccg gatgggtcatc tttcaacagg 780  
 ngtggttctg aatgcaacaa gagagatctc acttaaaaaat aagacttgct ttgacaangt 840  
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<210> 3655

<211> 782

<212> DNA

<213> Homo sapiens

<400> 3655

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 ctccgagtcg cccctgcgga ctggtctcgc acagtgcctg ggaccgggc gccagacaga 120  
 cactggccat gacgagcggc gcaaccaggt accggctgag ctgctcgctc cggggccacg 180  
 agctggacgt acggggcctg gtgtgctgcg cctatccgcc gggagccttt gtgtccgtgt 240  
 cccgagaccg caccaccgc ctctgggccc cagacagtcc aaacaggagc tttacagaaa 300  
 tgcactgtat gagtggccat tccaattttg tatcttgtgt atgcatcata ccctcaagtg 360  
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 cactggacag tccaatgcca ctttatattc taaaaggcca caaaaatact gtttgtagtc 480  
 tatcatctgg aaaatttggg acattactta gtggttcatg ggacaccact gctaaagtct 540  
 ggctgaatga caagtgcatt atgaccttgc agggctcacc aagctgcagt gtgggcggtg 600  
 aagatcttac ctgaacaggg cttaatgttg actggatcan caggcaagac tgttaaactg 660  
 tggaaggctg gaagatgtga agaggacttt ttcagggcatt gaagactgtg taagaagttt 720  
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<210> 3656

<211> 774

<212> DNA

<213> Homo sapiens

<400> 3656

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aacagcacag ctaacttga ggatcctgag gtgggtgatg ctgaaagcat ggcgatctca  180
gagccgatca agggcagcag aaagccctgt gtgaataagg aggagtggc tttgaagaag  240
cccatggcga aatgtgcctg gaagggtccc agagagccac ctcaggatgc cgggacagaa  300
gccgagagcc caggaggcgc ctctgagtca gaccaagatg gtggccatga aagcccacca  360
aagaagaagg ccgtggcctg ggtgtctgcc aagaaccccg ctcccatgag gaagaagaag  420
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aaggctctcc tcggcgtgcc ccaatgaatn cagaaaggnt tgatctgggg gaccacccat  660
acttgaggag ttgaaagaac aaggaagacg tnccaagtca accaagtttc tctctttgtc  720
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<210> 3657

<211> 870

<212> DNA

<213> Homo sapiens

<400> 3657

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cttttctaca aatatcagag ccatggctca ggagtcagt atgttcagt atgtgtccgt  120
agacttctct caggaggagt gggaatgcct gaatgatgat cagagagatt tatacagaga  180

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tgtgatgttg gagaattaca gcaacctggt ttcaatgggg cattctatit ctaaaccaaa 240  
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 aatttatgaa atagaatcaa cccagtggga aataatggaa aaactcacia gacgtgattt 420  
 tcagtgtccc agtttcagag atgattggga atgtaatagg cagtttaaga aagaactcgg 480  
 ctctcagggg ggacatttca atcaattggt attcactcat gaagatctgc ccactttgag 540  
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 taccattgag aaccttatga atgtaaggaa tgtggaaagt cctttagaca tccctcaaga 720  
 ctactcatc atcagaaaat tcatactggc aagaaacctt ttgaatgtaa ggaatgtgga 780  
 aaaaccttta ttggggcttc anaccttact cgacatcncc ggaattcaca ctgggtgaga 840  
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<210> 3658

<211> 784

<212> DNA

<213> Homo sapiens

<400> 3658

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 gccatcgaca taggcgggtc gttaaccaag ctggcctact attcaacggt acagcacaaa 180  
 gtcgccaagg tgcggtcttt cgaccactcc ggaaaggaca cagaacgtga acatgagccg 240  
 ccctatgaga tttcagttca agaagagatc actgctcgac tgcacttcat taagtttgag 300  
 aataacctaca tcgaagcctg cctggacttc atcaaagacc atctcgtcaa cacagagacc 360  
 aaggtcatcc aggcgaccgg gggcggggcc tacaagttca aggacctcat cgaagagaag 420  
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 gtgtcaaga acatccccc tgaggccttc gtgtaccaga aggattccga ccctgagttc 540  
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gtctccatcg tgaaggtgga gacggaggac aggttcgagt gggtcggcgg cagctccatt 660  
 ggaggcggca ccttctgggg gcttggcgct ctgctcacca aaacgaagaa gtttgacgag 720  
 ctctgcacc tggctcgang ggccagcaca gcaatgtgga catgctggtg ccggacgtnt 780  
 acng 784

<210> 3659

<211> 764

<212> DNA

<213> Homo sapiens

<400> 3659

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 cgcgctgctg cctcagcacc atggtgcgcc aggtcccagc ggctccgcgc cagatcccgc 180  
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 caagaaggct ggggtggaag tagaggctgg atggccctgt tccgggcctc tcctgagaat 540  
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 agggattggg accttcattg gtgaatttgc caccctgagc agcctnactg gtgacccggc 720  
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<210> 3660

<211> 788

<212> DNA

<213> Homo sapiens

<400> 3660

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gattacaggt gccaccacc acaccgcta attttgnatt tttagtagcc atgtggtttg 720
ccatgttggc cagctggttc gactctgcct cagtganccc cactantccc aagtgtggat 780
acgggtga 788
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<210> 3661

<211> 738

<212> DNA

<213> Homo sapiens

<400> 3661

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ggagaggaaa gagagagaat ttattagatt atatacttgt cccatggcat accacgtata 180
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tcattaat ttt ggatcttcta ttgatagcca taaatattat gtttatgtat tctaaaacct 420  
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 ctaat ttttg tatttttagt agagacgggg tttcaccatg ttgctangct ggtctcaaac 720  
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<210> 3662

<211> 866

<212> DNA

<213> Homo sapiens

<400> 3662

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 aaaactactt cgcaactata cccagaacat agacacgctg gaacagggtg cgggaatcca 180  
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 aaaaaagaa ttggcttatt tgtcagagtt gccaccaca cctcttcatg tttcagaaga 720  
 ctcaagttca ccagaaagaa cttcaccacc agattcttca gtgattgnca cacttttaga 780  
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<210> 3663

<211> 816

<212> DNA

<213> Homo sapiens

<400> 3663

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<210> 3664

<211> 874

<212> DNA

<213> Homo sapiens

<400> 3664

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cggaatcaga aatcagggtg gaacctgtta cctcaattcc cttcttcaga ctcttcattt 180  
cacacctgaa ttcagagaag ctctatcttc tcttggccca gaagagcttg gtttgtttga 240  
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<210> 3665

<211> 801

<212> DNA

<213> Homo sapiens

<400> 3665

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<210> 3666

<211> 750

<212> DNA

<213> Homo sapiens

<400> 3666

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<210> 3667

<211> 857

<212> DNA

<213> Homo sapiens

<400> 3667

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<210> 3668

<211> 867

<212> DNA

<213> Homo sapiens

<400> 3668

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<210> 3669

<211> 865

<212> DNA

<213> Homo sapiens

<400> 3669

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<210> 3670

<211> 852

<212> DNA

<213> Homo sapiens

<400> 3670

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<210> 3671

<211> 880

<212> DNA

<213> Homo sapiens

<400> 3671

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<210> 3672

<211> 845

<212> DNA

<213> Homo sapiens

<400> 3672

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<210> 3673

<211> 835

<212> DNA

<213> Homo sapiens

<400> 3673

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<210> 3674

<211> 882

<212> DNA

<213> Homo sapiens

<400> 3674

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<210> 3675

<211> 885

<212> DNA

<213> Homo sapiens

<400> 3675

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<210> 3676

<211> 886

<212> DNA

<213> Homo sapiens

<400> 3676

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<210> 3677

<211> 844

<212> DNA

<213> Homo sapiens

<400> 3677

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<210> 3678

<211> 811

<212> DNA

<213> Homo sapiens

<400> 3678

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<210> 3679



<211> 702

<212> DNA

<213> Homo sapiens

<400> 3679

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<210> 3680

<211> 826

<212> DNA

<213> Homo sapiens

<400> 3680

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<210> 3681

<211> 824

<212> DNA

<213> Homo sapiens

<400> 3681

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824

<210> 3682

<211> 813

<212> DNA

<213> Homo sapiens

<400> 3682

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<210> 3683

<211> 822

<212> DNA

<213> Homo sapiens

<400> 3683

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ctctgcggaa gttctgaatc aagaggagtg aatgagagcc acaagtctga atttatagag 180  
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<210> 3684

<211> 691

<212> DNA

<213> Homo sapiens

<400> 3684

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 gattggcang tccaactgta atgaatgcag naccattttc tctctacgac gtggttttct 660  
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<210> 3685

<211> 821

<212> DNA

<213> Homo sapiens

<400> 3685

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 ccccgatgc aacttaatct agcactctat actttaaatg ttttaaactt ttatagaaat 180  
 cagaccacta cctctgcaga acaacatctt actggtaaaa ggaacagccc acatgaagga 240  
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 gagacacccc aatcgactcg ccaggtaaac aaaatgggtga tatcagaaga acagaaaaag 480  
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 tagatggata atcctattga agtagatgtt aataatagtg catgggtgcc tggcccacan 780  
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<210> 3686

<211> 817

<212> DNA

<213> Homo sapiens

<400> 3686

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ctctagcagt gggattgcct ctgagttcag cagtgagatg tccacctcag aggtgagcag 180
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<210> 3687

<211> 800

<212> DNA

<213> Homo sapiens

<400> 3687

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<210> 3688

<211> 816

<212> DNA

<213> Homo sapiens

<400> 3688

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816

<210> 3689

<211> 766

<212> DNA

<213> Homo sapiens

<400> 3689

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<210> 3690

<211> 598

<212> DNA

<213> Homo sapiens

<400> 3690

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<210> 3691

<211> 816

<212> DNA

<213> Homo sapiens

<400> 3691

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816

<210> 3692

<211> 912

<212> DNA

<213> Homo sapiens

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<210> 3693

<211> 845

<212> DNA

<213> Homo sapiens

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<210> 3694

<211> 928

<212> DNA

<213> Homo sapiens

<400> 3694

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<210> 3695

<211> 877

<212> DNA

<213> Homo sapiens

<400> 3695

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<211> 887

<212> DNA

<213> Homo sapiens

<400> 3696

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<210> 3697

<211> 754

<212> DNA

<213> Homo sapiens

<400> 3697

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<210> 3698

<211> 822

<212> DNA

<213> Homo sapiens

<400> 3698

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<210> 3699

<211> 929

<212> DNA

<213> Homo sapiens

<400> 3699

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<210> 3700

<211> 936

<212> DNA

<213> Homo sapiens

<400> 3700

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<210> 3701

<211> 914



<212> DNA

<213> Homo sapiens

<400> 3701

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<210> 3702

<211> 894

<212> DNA

<213> Homo sapiens

<400> 3702

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<210> 3703

<211> 789

<212> DNA

<213> Homo sapiens

<400> 3703

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<210> 3704

<211> 891

<212> DNA

<213> Homo sapiens

<400> 3704

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<210> 3705

<211> 879

<212> DNA

<213> Homo sapiens

<400> 3705

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<211> 864

<212> DNA

<213> Homo sapiens

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<210> 3707

<211> 845

<212> DNA

<213> Homo sapiens

<400> 3707

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<211> 848

<212> DNA

<213> Homo sapiens

<400> 3709

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<210> 3710

<211> 917

<212> DNA

<213> Homo sapiens

<400> 3710

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 ggacggctag caggaagggt ctgcccctgg ggtctgcagt cagctcccca gtgctcttct 240  
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<210> 3711

<211> 827

<212> DNA

<213> Homo sapiens

<400> 3711

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 aattgggtcc agaaaggga gtgaggagaa tcagatccca gacctttggg gagaaggagc 240  
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<210> 3712

<211> 700

<212> DNA

<213> Homo sapiens

<400> 3712

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agagtaacta ttatgactga ttaacatatg caaaataat ttttaaaaat tatatcaagt 180  
ataacagaac ttattaaaga ttccacaggt tattataccc tcacactagg gtgggggtgaa 240  
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tgtgtgtgtg tgtaagagag aaagaaatgt ctacttaaaa ttgcagctc aaaanaacat 420  
tttgagttc acatgtgcaa gagaatccca cccctgcaa cttctctcaa tacttgaaac 480  
attaggttac tgctatgatt ttttctatta ttgagtttgt tacttttctc angttttaat 540  
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aagaacacaa aaaattntgt catatgtttt caattggggc aatgacatat aagtnccctc 660  
tgggtctcaa gganagagga tctacccttg acaataaaaa 700

<210> 3713

<211> 857

<212> DNA

<213> Homo sapiens

<400> 3713

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<210> 3714

<211> 745

<212> DNA

<213> Homo sapiens

<400> 3714

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 cctttgctat ttctctctgt accacaaatt aaaattagga gctttgggca nctgtcacgc 420  
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<210> 3715

<211> 907

<212> DNA

<213> Homo sapiens

<400> 3715

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tgatttggca tcttgcaaag atgagactga tgaaagctca aaagaagaac tgacctnaag 780  
 tgctgaagtt tagagtcaca tgccaacang gcaggagaag aaacattgct ttacctcaaa 840  
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<210> 3716

<211> 864

<212> DNA

<213> Homo sapiens

<400> 3716

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 cccgaggccg cccccaaaag gaaactgtca tcgataggaa tacaagttga ctgcattcag 420  
 ccagtgccaa aagaggagcc cagtcccgtt accaaattcc agtccatcgg ggttcaggta 480  
 gaggacgact ggcgaagcag cgtcccctct cacagtatgt cctcccgacg ggacacagac 540  
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<210> 3717

<211> 877

<212> DNA

<213> Homo sapiens

<400> 3717

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<210> 3718

<211> 950

<212> DNA

<213> Homo sapiens

<400> 3718

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tgaaagaaat ggttgccaac tgggacagcc taagaagtgg tcctgccagc actttcaatg 180

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 agtaccgtga attggctgtg gaagggatgc acagagaact tgtgttccgg tttattgaag 360  
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 ttctacgtaa acactttgag gcccaataacg gaaaactgcc tgacaacaaa gtcattgcta 720  
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<210> 3719

<211> 810

<212> DNA

<213> Homo sapiens

<400> 3719

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 aaaaaatagc ccaggaagat ccagagaagc agaggaaaat gcacatgttc attgctcgct 480  
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 accactgcca gggtttgatc ataggccgga ggatgaactg caatgtttgc gatgactttg 720  
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<210> 3720

<211> 774

<212> DNA

<213> Homo sapiens

<400> 3720

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<210> 3721

<211> 743

<212> DNA

<213> Homo sapiens

<400> 3721

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<210> 3722

<211> 833

<212> DNA

<213> Homo sapiens

<400> 3722

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gaaatagatg caatggatgt tcaacagctt ttacaaaata gtaccaaang gttgcagtan 780  
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<210> 3723

<211> 843

<212> DNA

<213> Homo sapiens

<400> 3723

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cagagacttc actcgcttaa accttntac tggatgatggc cagccatccc ttgaaccct 780  
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cca

843

<210> 3724

<211> 899

<212> DNA

<213> Homo sapiens

<400> 3724

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<211> 847

<212> DNA

<213> Homo sapiens

<400> 3725

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<210> 3726

<211> 825

<212> DNA

<213> Homo sapiens

<400> 3726

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<210> 3727

<211> 892

<212> DNA

<213> Homo sapiens

<400> 3727

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892

<210> 3728

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3728

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<210> 3729

<211> 870

<212> DNA

<213> Homo sapiens

<400> 3729

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agaaaataga aggtaaagat gagaagaatg ataatggagc aagtggccaa acatcagaat 180  
cgattaaaaa aagtgaagaa aagaagcgaa taagttccaa gagtccagga catatggtaa 240  
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<210> 3730

<211> 806

<212> DNA

<213> Homo sapiens

<400> 3730

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<210> 3731

<211> 754

<212> DNA

<213> Homo sapiens

<400> 3731

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<210> 3732

<211> 839

<212> DNA

<213> Homo sapiens

<400> 3732

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<210> 3733

<211> 773

<212> DNA

<213> Homo sapiens

<400> 3733

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<210> 3734

<211> 808

<212> DNA

<213> Homo sapiens

<400> 3734

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<210> 3735

<211> 701

<212> DNA

<213> Homo sapiens

<400> 3735

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<210> 3736

<211> 876

<212> DNA

<213> Homo sapiens

<400> 3736

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<210> 3737

<211> 836

<212> DNA

<213> Homo sapiens

<400> 3737

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<210> 3738

<211> 877

<212> DNA

<213> Homo sapiens

<400> 3738

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<210> 3739

<211> 857

<212> DNA

<213> Homo sapiens

<400> 3739

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<210> 3740

<211> 874

<212> DNA

<213> Homo sapiens

<400> 3740

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<210> 3741

<211> 931

<212> DNA

<213> Homo sapiens

<400> 3741

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<210> 3742

<211> 867

<212> DNA

<213> Homo sapiens

<400> 3742

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aatggactga agactttgna tactgga

867

<210> 3743

<211> 848

<212> DNA

<213> Homo sapiens

<400> 3743

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 gttcacactc gcttcaagga cgacgacggc gacgaggagg acgaaaatgg ggtcggcgac 240  
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 cttcagcccc attggttctc tagaagggca agaaatacaa gttaaggcaa aaanggccaa 780  
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<210> 3744

<211> 793

<212> DNA

<213> Homo sapiens



<400> 3744

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<210> 3745

<211> 590

<212> DNA

<213> Homo sapiens

<400> 3745

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acattgagaa ccttgaagga ccaganattt tttttgagga tgaactggtg tgtatcctaa 480  
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<210> 3746

<211> 840

<212> DNA

<213> Homo sapiens

<400> 3746

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 caatttgtct ttcccttttt tattaataatt atttttcctg cctgttggtg gatttgggga 180  
 aattttttgt ttgtttttta tgatttgtat ttgactgaga gaaaccact gaagacgtct 240  
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 caagctacct cttatagtga aatatgagtt gcctttgggt gatccaggca ttaacgaaca 780  
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<210> 3747

<211> 806

<212> DNA

<213> Homo sapiens

<400> 3747

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gaatccgcca tgggctactc agtttacagc cactgcagta tcacagnag ctgcactggg 180  
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tgaaagctct tataatccta atatgccttt taaatggaat gcacagagaa ttcaaact 720  
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<210> 3748

<211> 727

<212> DNA

<213> Homo sapiens

<400> 3748

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ggataatggg ggggtggggc cgttgggggg taaaggggca atagcgtcct ttcacaggct 180  
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<210> 3749

<211> 798

<212> DNA

<213> Homo sapiens

<400> 3749

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<210> 3750

<211> 869

<212> DNA

<213> Homo sapiens

<400> 3750

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<210> 3751

<211> 803

<212> DNA

<213> Homo sapiens

<400> 3751

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<210> 3752

<211> 837

<212> DNA

<213> Homo sapiens

<400> 3752

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<210> 3753

<211> 778

<212> DNA

<213> Homo sapiens

<400> 3753

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<210> 3754

<211> 808

<212> DNA

<213> Homo sapiens

<400> 3754

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<210> 3755

<211> 797

<212> DNA

<213> Homo sapiens

<400> 3755

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<210> 3756

<211> 850

<212> DNA

<213> Homo sapiens

<400> 3756

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<210> 3757

<211> 894

<212> DNA

<213> Homo sapiens

<400> 3757

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<210> 3758

<211> 736

<212> DNA

<213> Homo sapiens

<400> 3758

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<210> 3759

<211> 767

<212> DNA

<213> Homo sapiens

<400> 3759

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gaggcccgga ggccaccctt gaggtccgtg ggctgcgctg ctgcggtg tccgccttcc 180  
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<210> 3760

<211> 872

<212> DNA

<213> Homo sapiens

<400> 3760

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<210> 3761

<211> 826

<212> DNA

<213> Homo sapiens

<400> 3761

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atgatgatga tccacttcct attacgagac tggtatttgg ttggaagaaa aggaccgtnt 780
caaagaaaaa tgggcccttt ttaaagaacc cnaaaaagaa attttt 826
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<210> 3762

<211> 818

<212> DNA

<213> Homo sapiens

<400> 3762

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 aagaatgaac tgcacaaatt caagagtaaa gatcatgagt gaactggtca gcaatggggt 720  
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<210> 3763

<211> 839

<212> DNA

<213> Homo sapiens

<400> 3763

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<210> 3764

<211> 722

<212> DNA

<213> Homo sapiens

<400> 3764

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<210> 3765

<211> 746

<212> DNA

<213> Homo sapiens

<400> 3765

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<210> 3766

<211> 840

<212> DNA

<213> Homo sapiens

<400> 3766

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<210> 3767

<211> 811

<212> DNA

<213> Homo sapiens

<400> 3767

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<210> 3768

<211> 857

<212> DNA

<213> Homo sapiens

<400> 3768

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<210> 3769

<211> 873

<212> DNA

<213> Homo sapiens

<400> 3769

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<210> 3770

<211> 790

<212> DNA

<213> Homo sapiens

<400> 3770

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 gtcggcccca agaagagttg gaacccggca ttcacaaatc acctggaaaa ggggagccaa 720  
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<210> 3771

<211> 753

<212> DNA

<213> Homo sapiens

<400> 3771

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 tttctgtcag attttgagat gatgttgacg cgaaaaaaga gcatgagtgg caagcgcaga 180  
 cggaaccgcg atggtggcac ctttattagt gatgcagacg acgtcgtgag tgccatgac 240  
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 ctgaaaaaat taactttact gcctgctgta gttatgcacc ttaagaagca ggaccttaaa 360  
 gaaacattca ttgacagtgg tgtgatgtct gccatcaaag aatggctctc acctctacca 420  
 gataggagtt tgcctgcact caagatccgg gaggagctgc tgaagatcct gcaagagctg 480  
 cctagtgtga gccaggagac cctgaagcat agtgggattg gacgagcagt gatgtatctc 540  
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 gagcanagag atctanaaca gatgcctnaa cgacgaagaa tgaacagcac tggttggtcaa 720  
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<210> 3772

<211> 821

<212> DNA

<213> Homo sapiens

<400> 3772

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agctagctgc caaatcaaag tttttaagcc taaagggtgca gacaggaaac aaaaaactga 180  
ccgagagaag atggagaaga gaacagctca tgaaaaagaa aagtatcagc cgtcctatga 240  
taccacaatc ctcacagagt gtctctcgtg gcccgatgcc tccacagcct atgtgaataa 300  
cagcccttcc ccagcgccca ctttcacctc cccacagcag agcacttgca gtgtcccaga 360  
cagcaattct tcttcccaa atcatcaggg agatggagct tcacagacct ctggtgaaca 420  
aattcagcct tcagctacga tccaggaaac acagcaatgg ctgctcaaaa acagattctc 480  
ttcttacaca agactgttct ctaatctttc aggtgccgac ttattaaaac tgacaaagga 540  
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aaggtcggtt agaccccggt taaccatcta tgtctgccgg gagcagccaa gcagcacagt 660  
gctgcaaggg cagcancaag ctgcaagcag tgcaagcgag aatggcagtg gggcacccta 720  
tgtttatcat gcaatctact tgggaagaaa tgattggctc agaagttggt tcgaaaactt 780  
tgcgctggng gttaatatnc cttttccacc naatttaate a 821

<210> 3773

<211> 846

<212> DNA

<213> Homo sapiens

<400> 3773

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aatcgcgag cggcgcccc gggatcgatg gcgatgaact ataacgcgaa ggatgaagtg 180  
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gccttcaaac agcaacggct gccagcttgg cagcccatcc ttacggctgg cacggtgcta 300  
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 tccaacaaca tccgcgagat cgagattgat tataccggaa cagagccttc cagtcacctgt 420  
 aataaatggt tatctccgga tgtgacacct tgcttttgta ccattaactt cacactggaa 480  
 aagtcatttg agggcaacgt gtttatgtat tatggactgt ctaatttcta tcaaaacat 540  
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 aatcccagta aggaatgtga accttatcga agaaatgaag acaaaccaat tgctccttgt 660  
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 tcttataccta tacctatcgc tttgaaaaag aangtattgc ttggtggaca gataaaatgt 780  
 gaaattcgaa atcccctgga ggaacaacct ggaaaacgat taaaggtcca caaacctgtg 840  
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<210> 3774

<211> 860

<212> DNA

<213> Homo sapiens

<400> 3774

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 gtatcagtgg gtgttgatga agaaattggt tatgccaaat caactgcctt acagacatgg 240  
 ctcttttggt atgaactaac tgatactatc atggctcttt gtgatgacaa aatcatcttt 300  
 atggccagca agaaaaaagt ggagttcttg aaacagattg ccaacactaa gggcaatgag 360  
 aatgctaata gagcccctgc catcacactg ctaatacgag aaaagaatga aagtaataag 420  
 agtagctttg acaaaatgat tgaagccatt aaagaaagca agaattggcaa gaaggttgga 480  
 gtgttcagca aagacaaatt ccctggagag ttcatgaaga gctggaatga ctgcctcaac 540  
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aaattcttca aggaaagagt catggaaata gttgatgcag atgagaaagt tcgacacagc 720  
 aaactggctg agtctgtgga aaaggccatt gaagagaaaa aatccttgct tggggcagac 780  
 ccttctactg nggaaatgtg gtacccttct atcattcana gtggtggcac tattaatctc 840  
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<210> 3775

<211> 871

<212> DNA

<213> Homo sapiens

<400> 3775

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 ttcgcgcgcg ggtgctcccg ggccaggcgg tgaccggcgt gcggggaagc gctctgcgga 180  
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 ctgcactgaa taatgattcc agccagaatg tcttgagcct gtttaatgga tatgtttaca 300  
 gtggcgtgga aactttgggg aaggagctct ttatgtactt tggacaaaa gctttacgga 360  
 ttcatttcgg aatgaaagc ttcacatga ttaatccact tgagtataaa tataaaaatg 420  
 gagcttctcc tgttttggaa gtgcagctca ccaaagattt gatttgtttc tttgactcat 480  
 cagtagaact cagaaactca atggaaagcc aacagagaat aagaatgatg aaagaattag 540  
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 gccgatgct aggtgatgtg ctaatggatc anaacgtatt gcctggagta gggaacatca 660  
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 cagatgaaca natccatcac ctcatgaaaa tgatacgtga tttcagcatt ctctttttac 780  
 aggtgcccgt aaaacaagga ctttgctctc ttttaaacac ttttaaggttt acaagccggt 840  
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<210> 3776

<211> 834

<212> DNA

<213> Homo sapiens

<400> 3776

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 ttttaggagc tgttccaaga ttgttgact tgcttcagca agaaacctca agcacagggc 180  
 tgaaaactga atgtgcagtg gtgttgggaa gtcttgctat gggtactgaa aacaatgtca 240  
 agtctctact ggactgccat attatccctg ccttattgca aggactactg tccccagacc 300  
 tgaagtttat tgaagcttgc ctccgatgcc tgcgtaccat cttcaccagt cctgtcactc 360  
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 atcatcaaac aattttat tt aaccacggtg cagttcagaa tattgctcac ctactaacct 540  
 cactgtccta caaagttcga atgcaagcac tgaaatgttt ctgagtttta gcttttgaaa 600  
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 tttttgtgaa gatgttacag agggataagc ctattgagat gcagctcaca tcagcaaaat 720  
 gttaactta catgtgtaga gctggagcaa ttcggacaga tgataactgn attggattaa 780  
 aagacattac cttggttggn tcgaatgtgc ataaggagag attactagag gana 834

<210> 3777

<211> 846

<212> DNA

<213> Homo sapiens

<400> 3777

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 tgcaccagcg ctctactca gtctccagtg ccgaccagtg gaggtaggct acggtcattg 180  
 caaactcggc catcagcagt gacacagggc tgggtgactc cgtatgctcc agccccagta 240



tctccagcac caccagcccc aagctcgacc cgccccctc ccctcacgcc aacagaaaga 300  
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 aagaacaaga agaaaatatt gagtttatca ttgtgtccct cactggccaa acatggcact 420  
 ttgaagccac gacgtatgag gagcgggacg cctgggtcca agccatcgag agccagatcc 480  
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 aggccatggc cctgcagtcg atccggaaca tgcgcgggaa ctcccactgt gtggactgcg 600  
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 cagggatcca ccggaatctt ggcaaccacc ttcccagagt ccgatctctg gacctggatg 720  
 actggccaat cgagctcatc aaggtgatgt catccatcgg gaacgagcta gccaacagcg 780  
 ttttgggaag anagcagcca ggggcggacg aaaccatngt agactncaca agggaagaga 840  
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<210> 3778

<211> 788

<212> DNA

<213> Homo sapiens

<400> 3778

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 ctctctcgga agccggatcc cgagccgggc aggatggatc accaccagcc ggggactggg 180  
 cgctaccagg tgctttctaa tgaagaggat aactcagaat catcggctat agagcagcca 240  
 cctacttcaa acccagcacc gcagattgtg caggctgcgt cttcagcacc agcacttgaa 300  
 actgactctt cccctccacc atatagtagt attactgttg aagtacctac aacttcagat 360  
 acagaagttt acggtgagtt ttatcccgtg ccacctccct atagcgttgc tacctctctt 420  
 cctacatacg atgaagctga gaaggctaaa gctgctgcaa tggcagctgc agcagcagaa 480  
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 cagctcagag tggggaatga tggcattttc atgctggcat ttttcatggc atttattttc 600  
 aactggcttg gattttgttt atccttctgt atcaccaata ccatagctgg aaggtatggt 660

gctatctgcg gatttggcct ttccttgatc aaatggatcc ttattgtcag gttttctgat 720  
tattttactg gatatttcaa tgggacaagt attggctttg gnggatattc ttgnacttgg 780  
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<210> 3779

<211> 813

<212> DNA

<213> Homo sapiens

<400> 3779

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ggctccaacc cattccagca ccttgagaag agtgcggtac tccaggaggc ccgtgtatatt 180  
aatgaaactc ccatcaaccc tcggaaatgt gccacatcc tcaccaagat tctttatctc 240  
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aagctctttc agtccaatga tcccacactc cgtcggatgt gctacttgac catcaaggag 360  
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gggaaagaag acaactaccg gggcccggcc gtgcgagccc tctgccagat cactgatagc 480  
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aagcgctggg tgaatgaagc tcangaggca gcatccagtg ataacatcat ggtccagtac 660  
cacgcactan ggcttctgta ccatgtgcgt aagaatgacc gctaccgtca ataagatgat 720  
cagcaaggtc acacggnatg ggcttaagtc ttcctttggc tactggatga tgatcccggc 780  
gggcaacaag canctggaaa aagaggatgg cna 813

<210> 3780

<211> 852

<212> DNA

<213> Homo sapiens

<400> 3780

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 attcatcctg gatgaagtgg atgttcacat tcaggcaaata ctggaggatg agttagtaaa 180  
 ggaagctctt aaaacgggtg tagatctccg tcactattca aagcaagttg agctggagct 240  
 acagcagatt gaacagaaat ccattcggga ttatattcaa gagagtgaga atatagcatc 300  
 tctacacaac cagatcacag cctgtgatgc tgtcctggag cgaatggagc agatgttggg 360  
 agcttttcag agtgacctca gctccatcag ctctgagatc cggacactgc aggaacagtc 420  
 aggagccatg aacattcgac ttcgaaatcg ccaggcagtt cgggggaaac ttggggagct 480  
 tgttgatggt ctggtgggtc cttctgctct ggtcacggca attctggagg ctccagtgc 540  
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 cccatgacca actatcagat cccccanacg ggcctgctga agtacagggt cttctatcag 780  
 tttctgctgg gcaatgaacc agccacagcn aaggagatca gggatgaata tgtggaaacn 840  
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<210> 3781

<211> 831

<212> DNA

<213> Homo sapiens

<400> 3781

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 ctttggaac aacatttgag actatttcaa cactttcagg ttagatttg gaaaatggta 180  
 cttgcagtca tccattaatt cctgataaag cctctcctct ttacctgca aatcatgtga 240  
 ccatggcaaa aggaacggga ttgggtcaca cagccccagc tcatggtatg gaagactacg 300

gtgtagcgtc tcagcacaac ctgccccatgg attgtctagt ggacgaagat ggagttttca 360  
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 ttataaagat gcttcanact gcaaagaatt tgttgaaaga ggagaaattg gtgcatagct 480  
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 ctggatcagc actgaatggc atgggtgaaa tgatggacag gcggcatatt ggtgtatatc 660  
 aaggcaaaga gtttgggggtg ttccaattcc tngtittcat cataagacca aggatgaatc 720  
 ttgatcaaca gccaaaccac tgagcatatt ggtaaactag tgnnaccacc cnggagtgat 780  
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<210> 3782

<211> 876

<212> DNA

<213> Homo sapiens

<400> 3782

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 gccttgccat gttgaaggac ggcttccgca ctgacagggg gtctcactca gacctgtggt 180  
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 gctcccagac agacatctcg ggaagcttcg gcatcaacag caacaatcag ttggcagaga 300  
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caagtgacca aatcggnag ccatggggtg ccaacccgaa ttcanaattg gccttgaant 840  
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<210> 3783

<211> 862

<212> DNA

<213> Homo sapiens

<400> 3783

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aaaattcatg ccgaagtcca acttaagaat tatgggaaat ttcttgagga gtatacctct 180  
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actgaaatct gtccatcaca atccttcaaa atttggaat tcaggaagaa aaattaaaag 780  
ccatttgaaa aagttcttgc tgaanctaga anggcaatta ctggatggaa tgatattcca 840  
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<210> 3784

<211> 845

<212> DNA

<213> Homo sapiens

<400> 3784

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attctggctg aggcagtgat ggaggggagg ccaacgcccg acaaaacgtt gctgaatgac 180  
tctgagattt gccacactga tgaccttgcc agcttgccat catgcaaaga aaatcctgaa 240  
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gaaggggccc aggatggctt gagcaagccc aagaatgggt ctgatgggga agaaatgacc 540  
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ccagagatga ttgacagcag ggtgctggag aacctcaaac agcagctgga ggaacaggaa 660  
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cagaaataag ttcagagatc tctcaccttc cagatacgat tcattagttc agtcccaagc 780  
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<210> 3785

<211> 793

<212> DNA

<213> Homo sapiens

<400> 3785

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gtggtacacc tgatactgtt ctatgagaac cggctgaagg accatcatct tgtgatccca 180  
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cgacacacag tctacaatat catcaccaat tttatgcgaa cccgggaaga agagctaaag 360  
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<210> 3786

<211> 664

<212> DNA

<213> Homo sapiens

<400> 3786

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<210> 3787

<211> 850

<212> DNA

<213> Homo sapiens

<400> 3787

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<210> 3788

<211> 667

<212> DNA

<213> Homo sapiens

<400> 3788

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<210> 3789

<211> 749

<212> DNA

<213> Homo sapiens

<400> 3789

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<210> 3790

<211> 759

<212> DNA

<213> Homo sapiens

<400> 3790

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<210> 3791

<211> 778

<212> DNA

<213> Homo sapiens

<400> 3791

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<210> 3792

<211> 863

<212> DNA

<213> Homo sapiens

<400> 3792

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<210> 3793

<211> 709

<212> DNA

<213> Homo sapiens

<400> 3793

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<210> 3794

<211> 856

<212> DNA

<213> Homo sapiens

<400> 3794

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<211> 869

<212> DNA

<213> Homo sapiens

<400> 3795

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<210> 3796

<211> 811

<212> DNA

<213> Homo sapiens

<400> 3796

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<210> 3798

<211> 797

<212> DNA

<213> Homo sapiens

<400> 3798

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<211> 692

<212> DNA

<213> Homo sapiens

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<210> 3800

<211> 784

<212> DNA

<213> Homo sapiens

<400> 3800

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<210> 3801

<211> 740

<212> DNA

<213> Homo sapiens

<400> 3801

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cgctctagga caagtttgat ggatcgccag gctcgtaaac tagctaatac acataatcag 600
ggtgacagtg atgatgatgt agaagaaaca cattcaatgg atgggaatga tagtgattat 660
gatcccaaaa aagaagccca aaaaganggt aatactggac aacctgttcn aactagccag 720
aatggacttg ggaanaaaga 740

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<210> 3802

<211> 784

<212> DNA

<213> Homo sapiens

<400> 3802

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tccaaagaac caaagccttt tgtatttgag ggaaaagtac gtggtcctat tgttgttcct 180
acggcaggcg aggaaacatc tgggaattct ggcaatttaa gaaaggttgt aatgaaggag 240

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aacatatctt ctaaaggaga tgaagggtgaa aagaagtcta cctttgtgga tctagcaaaa 300  
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 atttcatcag tccatggttt aaacaatgat attgtaaagg ccttgaccg aattacattg 420  
 cagaatattc cttctcaaac agccccaggt tttactgcag aaatgaagaa ggactgcagt 480  
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 gttctgtttg agggaagaac agttcagcta gggaagcttt gctgcactgg agttgaaact 600  
 gaagatgatg aagatactga gtcaaattca tcggtagaac aagcatcggg tgaagtacct 660  
 gatggaccaa cacttcatga cccagacctc tatattgagg attgtgaaaa atacgaaant 720  
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 cttt 784

<210> 3803

<211> 806

<212> DNA

<213> Homo sapiens

<400> 3803

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 gagatcgtgg accctctgta cggcatagct gaggtggaga ttccaacat ccagaagcag 180  
 aggaagcagc ttgcaagatt ggtgttagac tgggattcag tcagagccag gtggaaccaa 240  
 gctcaciaat cctcaggaac caactttcag gggcttccat caaaaataga tactctaaag 300  
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 gcccaagcag attaccatag aaaagcatta gcagtcttag aaaagaccct ccccgaaatg 480  
 cgagcccatc aagataagtg ggcggaaaaa ccagcctttg ggactcccct agcagaacac 540  
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 aagctgaaag ctgcttttga ctggtctact tctcacctgg atgagttcta ttcagacccc 720

catgctgtag caggtgcttt aaaatcctat ttaccggaat tgnctgacct ttgatgactt 780  
ttaatctgga tgaanaatgg ncccag 806

<210> 3804

<211> 695

<212> DNA

<213> Homo sapiens

<400> 3804

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ggctctcttag agcgttaaaa ggatctgaac aaagtctgct caaatctcct gctgtgaacc 180  
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tacggaacag aatggcagcg gaaacgcaga cactgaactt tgggcctgaa tggctccgag 360  
ctctgtccag tgggtgggagt attacatccc ctctctttc tccagcattg ccgaagtata 420  
aattagcaga ttatcgttac ggcagagaag aaatgttagc acttttcctt aaagacaaca 480  
agataccttc agaccttctg gataaagaat ttctgcctat cctccaggag gaacccttc 540  
caccattggc tctggtaccc ttacagaag aagaacagag aaacttttcc atgtctgtaa 600  
atagtgtgc tgtcctgcga ttgacaggac gaggaggagg aggaacagtg gtgggggctc 660  
ctagaggtcg aagtcttca agangccan gcana 695

<210> 3805

<211> 745

<212> DNA

<213> Homo sapiens

<400> 3805

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gggggacaga taaacaccac agatgcccat caaaggggcg cacgggtctg gaggcgcagc 120  
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 ttgaaaggaa ggtgctgtca atgctatccg acgacctgtc gccgggcacc gcagcatcct 240  
 cgctcgctcc gatgggacga gggacgccgg ccccagggtta acaggaggcg cctcgccggc 300  
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 gacccacccc gacaggccag agaaacagaa aggtcaaattg attctggaaa tggtagcac 420  
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 gcgacctcan tctataaaac tncaaatcca tcccgctctt cttgctcctg atagtacctc 660  
 tttatctgct ggaaataatt catcangata cattgggtatc ccgactagta catcggaat 720  
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<210> 3806

<211> 849

<212> DNA

<213> Homo sapiens

<400> 3806

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 gttggctact cagtgtcttg gtctcaagtt gcctcattgc ggctggcggtt cccaatacag 120  
 acgcatcggtt tcttttttaa tactccctaa gaaagggaat aaccttcaag ctggcgggag 180  
 caatggttca cataaagaaa ggcgagctga cccaggagga gaaggagcta ctggaagtca 240  
 tcgggaaagg tactgtccaa gaagctggaa cattattatc cagcaagaat gttcgtgtca 300  
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 gatacacagc cctcatgttt gctgcacttt ctggtaataa agacatcaca tgggtaatgt 480  
 tagaagctgg tgctgagaca gatgttgtca actctgtggg aagaacagca gctcagatgg 540  
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 tggcaggccc gctgcacaaa attatcacca caacgaatct tcatcctgtc aagatcgtga 720  
 tgctttgtaa atgaagaatc ctcttgcttg cagaaagaag cagcccctga ataaatgcta 780  
 cagagtgatg gatttgattt gngagaaatg tatgaacana gagacctgaa ttgaaatatt 840  
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<210> 3807

<211> 770

<212> DNA

<213> Homo sapiens

<400> 3807

agtggcgac atggtggcac ccgtgctgga gacttctcac gtgttttgct gcccaaaccg 60  
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 ctgctccgtg gtgctctatg accccctgaa aagggttggt gttaccaact tgaatggatc 180  
 caccgcccga gtcaattgca tacagtggat ttgtaaacag gatggctccc cttctactga 240  
 attagtttct ggaggatctg ataatacagt gattcactgg gaaatagagg ataatacagt 300  
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 ccagaggagg acatcagatc ctgcattatg tacactgac gtttctgcag ctgcagattc 420  
 tgctgttcga ctctggtcta aaaagggtcc agaagtaatg tgccttcaga ctttaaactt 480  
 tggaaatgga tttgctttgg ctctctgctt atcttttttg ccaaatactg atgtaccaat 540  
 attagcatgt ggcaatgatg attgcagaat tcacatatat gctcaacaaa atgatacgtt 600  
 tcagaaagt ctttctctct gtggacatga ngattggatt anaggantgg aatgggcaac 660  
 ctttggtaga gatcttttcc tagcaagctg ttcacaagat tgcctgataa gaatatggaa 720  
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<210> 3808

<211> 692

<212> DNA

<213> Homo sapiens

<400> 3808

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aaaagaagaa acgcaggcgg ggcagaaaag aggagcccga aggtggtagc aggccggcgt   60
gtgggggagc tggcaccagc gggcctgtgc agctgggtcaa ggaggtggtg gccgaggatg  120
gcaccgtggt caccattaag caggtgctca ccgcgccagg ctcggcgggg cagccccggt  180
ctgaggacga agacagcctt gaggaggccg gcagccccgc acctgggccg tgtccacgct  240
ccaacgccat gctggctgtg aagcatgggg tgctctacgt ctatgggggc atgtttgagg  300
ccggcgaccg ccaggtcacc ctacagcacc tgcactgcct ggacctgcac aggatggagg  360
cgtggaaggc cttggtggag atggaccagc aaactcagga gtggctggag gagacggact  420
cggaagagga cagtgaggag gttgaggcgc ccgagggtgg ggtcgacgac naagacagcg  480
gagaggagag cgggtgcggag gactgangct gtgacaaacc ctgtgccac gctgccttca  540
ctgccgggag actcanggct tgggggagac atgccctggt caccacttgc ggagactcan  600
ggcttggggg gagacatgcc ctggccacca ntggtgaacc agccgaagac aggaccccaa  660
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<210> 3809

<211> 850

<212> DNA

<213> Homo sapiens

<400> 3809

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aacctcgtgc tttctgcaga ggagaccgga gggcagaagg cagagtccag gcttagactg   60
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aggagcttcg tgttggtggg ctgctaaccg gtacgtttcc gtgggcaagt cgtgtgtact  180
cctcgccatg gctcagctcc aaacacgctt ctacactgat aacaagaaat atgccgtaga  240
tgatgttccc ttctcaatcc ctgctgcctc tgaaattgcc gaccttagta acatcatcaa  300
taaactacta aaggacaaaa atgagttcca caaacatgtg gagtttgatt tccttattaa  360
gggccagttt ctgcgaatgc ccttggacaa acacatggaa atggagaacg tctcatcaga  420

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agaagttgtg gaaatagaat acgtggagaa gtatactgca cccagccag agcaatgcat 480  
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 acatacggat gttgtaaaag atgtggcctg ggtgaaaaaa gatagtttgt cctgcttatt 660  
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 agtgaaagcc ctacactgct gtanangtca tgctggaagt gtagattcta tagctgggtga 780  
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<210> 3810

<211> 849

<212> DNA

<213> Homo sapiens

<400> 3810

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 aattccaggt ggcacaacgg tgctgggtgga gctgactccc gacatccata tctgcggcat 180  
 ctgcaagcag cagtttaaca acctggatgc cttttagtct cacaagcaaa gtggctgcca 240  
 gctgacaggc acatccgcag cagccccag caggtccag tttgtatcgg aggaaacagt 300  
 gcctgccacc cagactcaga ccaccaccag aaccatcacc tcggagacct agacaatcac 360  
 aggttgccaa ttcaagactg cttatggcat gaaggacatg gagcggcatt taaaaattca 420  
 cacgggagac aaacccata agtgtgaagt ctgtggcaag tgcttttagcc ggaaagacaa 480  
 gctgaaaact cacatgcggt gccacacggg cgtgaagccc tacaagtgtg agacgtgtga 540  
 ctacgccgct gccgacagca gcagcctcaa caagcacctg aggatccact cggacgagcg 600  
 gcccttcaaa tgccagatct gccctacgcc agccgcaact ccagccagct nctgtccacc 660  
 tgcgatccca cacgggggac gcccccttcc agtgctggct ctgtagcgcc aagttcaaaa 720  
 tcagctcgga cttgaaaang cacattgcgg gtgcacttcg ggggagaacc tttcaagtgc 780  
 aattctgcaa tgtccgntga ccatgaaggg gaaccttaag tcgcacatcc gtatcaagcc 840



cagcgggan

849

<210> 3811

<211> 793

<212> DNA

<213> Homo sapiens

<400> 3811

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gcagcccagg cggctccgaac ccgtcggccg gccgagcctg gagtattgcc taagtgtaat 120  
cttgaacatg ggcggtgctg tgagtgtggt tgaagacaat gaagagctga tagataattt 180  
gaaagaagca cagtatatcc ggactgagct ggtagagcag gctttcagag ctatcgatcg 240  
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tggaacatt cacctctcag ccccggtgat ctactcggag gtgatggaag ccctagatct 360  
gcagcctgga ctctcgtttc tgaacctggg cagtggcact gggtatctca gctccatggt 420  
gggcctcatt ctaggtcctt ttggtgtgaa ccatggggtg gaacttcact cagatgtgat 480  
agagtatgca aagcagaaac tggacttctt catcagaaca agtgatagtt ttgacaagtt 540  
tgacttctgt gaaccttcct ttgttactgg gaattgcctg gagatttctc cggattgttc 600  
tcagtatgat cgtgtatact gtggggctgg cgtgcagaaa gagcatgaag agtacatgaa 660  
gaatcttctc aaagtgggag ggatccttgt catgccactg gaagagaagt tgactaagat 720  
aacacgcaca ggtccttcac ttgggaaacc naaaagattc tgctggttct tttgctnctc 780  
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<210> 3812

<211> 825

<212> DNA

<213> Homo sapiens

<400> 3812

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 gtggtaaatt agacaacact aacgaatata atagtaatga tggtaagaaa ttaccccagg 180  
 gtgaatcacg aagttacgaa gtcattggga gtattggaaga aaccttatgc aatatagatg 240  
 acagagatgg aaatcgcaat gtccatttag aatttacaga aagagagagt aggaaggatg 300  
 gagaggatga atttgtcaaa gaaatgagag aggaaagaaa atttcagaaa ttgaagaata 360  
 aagaggaggt tttaaaagcc tccagagaag aaaaagtgtt gatggatgaa ggagcagtac 420  
 ttacctgggc agccgacctt tcatcagcaa cactggatat tagtaagcaa tggagtaatg 480  
 tcttcaacat tctgagagaa aatgattttg aacctaaatt tctgtgtgaa gttaaattag 540  
 catttaaatg tgatggtgaa ataaagacat tttcagatct gcaaagcctt agaaaatttg 600  
 ccagccaaaa atcttctatg aaagaattac tgaaagatgt actcccacaa aaggaagaaa 660  
 taaatcaagg aggaagaaaa tatggaattc aagaaaaaag ggataaaacc ctaatagact 720  
 caaagcatag agctggagaa atnaccagtg atggcttgag cttcctatct cttaaagaag 780  
 taaaagttgc taagccngan gagatgaaaa cttagagact cagga 825

<210> 3813

<211> 743

<212> DNA

<213> Homo sapiens

<400> 3813

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 atgtaatatg tttttagccg atggatttaa acatgtagat tcaactagaa tccattttgtg 180  
 atatttgtaa ataaaggtag aaatattaga tccattttctg cagaacttac tgtacagttt 240  
 agttggagtg tagcactgaa gaactgtcag ctcagcgttg actgaggaga tagtgaaaat 300  
 agcctataca cagcatcttg tgaaaagtac tggcagccgt ggttgcagca aataataggg 360  
 caaaaaaat aataataggg tggtcggttc cttttcatct ccttcttctg aaaggaaaaa 420  
 attgaattgg aacgttcaag tccagtttgt gttcagtcac aaaactgggc cagttgttaa 480

ccttacagaa tgagtcattgt ggccagacct tcaagtccaa ggccttcaga cactaaggat 540  
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 aaagctcttc cactagttag attttcatgc ncatattttt tcttaaccgt tgggtgccagt 660  
 naagcnaaga gtattatgat ggaaaaagac cagtccaagc cccatcggtc cggaatggga 720  
 gcccatgggtc ttggctaata ggt 743

<210> 3814

<211> 812

<212> DNA

<213> Homo sapiens

<400> 3814

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 tcaatgtctt tggccgcaag ctccagggtta atggcagaaa cctcctttca gttgactttg 180  
 atcgaacaac aaagacagaa aagatctatg acgaccaccg taaatttcta ctgaggatcg 240  
 cctacgacac gtctgggcac ccgactctct ggctgccaag cagcaagctg atggccgtca 300  
 atgtcaccta ttcattccaca ggtcaaattg ccagcatcca gcgaggcacc actagcgaga 360  
 aagtagatta tgacggacag gggaggatcg tgtctcgggt ctttgctgat ggtaaaacat 420  
 ggagttacac atatttagaa aagtcattgg ttcttctgct tcatagccag cggcagtaca 480  
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 gcaacgcctc catcatcacg gactacaacg aggaagggtc gcttctacaa acagctttct 660  
 tgggtacaag tcgganggtc ttattcaa atacagaaggca gactangctc tcagaaattt 720  
 tatatgatag cacaagaagt cagntttacc tatgatgaaa cagcaggagt cctaaagaca 780  
 gtaaaccttc agaggngatg gtttanttgc cc 812

<210> 3815

<211> 771

<212> DNA

<213> Homo sapiens

<400> 3815

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ggaagttgaa ggaacagtgt gaggaaccga aatttaagag gtcacaaaaa agggggaatg 720
aancttgatn ctttccagag accttgaatn gaaaaaccaa cgaaccagaa g 771

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<210> 3816

<211> 850

<212> DNA

<213> Homo sapiens

<400> 3816

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gtgaaaggag ggaacgcagg tgagaaagcg agacaggcag gtagggaaat cgtgaggtga 60
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gcggacagct ggcagagaga gaagttggct agcatggaat caccagagga gcctggagca 180
tccatggatg agaactactt tgtgaactac actttcaaag atcggtcaca ttcaggccgt 240
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 gatgtcagcg agtctgtttt ccagctcctg gttgattata tctacatgg gactgtgaaa 480  
 cttcgagctg aggagttgca ggaaatttat gaggtgtcag acatgtatca gctgacatct 540  
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 gtgatgtggc tggcagatcg gcacagtgat cctgagctct atacggctgc caagcactgt 660  
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 ttactccaga tatcatctcg gatggagttc cgtgtttctca gacccaacag aggcaataga 780  
 acctggatca ctttataaan angaaagaaa ngctttttgca gaatcctcag gacagcttga 840  
 aggaaattgg 850

<210> 3817

<211> 823

<212> DNA

<213> Homo sapiens

<400> 3817

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 gtgggtaccc tctcctgacg cctccgccgc ccgggtcatg tggaccctcg tgggtcgggg 180  
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 ggggccccgg nccgcgccga cccttggggc tgctccagag tcctgggcta ccgacaggct 300  
 ctacagctcc gcagaattca aggaaaaacc tgacatgtct aggtttcctg ttgaaaatat 360  
 tagaaatttc agtattgttg cacacgtgga tcatggcaaa agtacttta ctgacaggct 420  
 cctagaactt acagggacaa ttgataaaac aaagaataat aagcaggttc ttgataaatt 480  
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ggtaattcca gttntaaata agatagatct gaagaatgct gacctgaaa nggttgaaaa 780  
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<210> 3818

<211> 879

<212> DNA

<213> Homo sapiens

<400> 3818

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cctgcagaac aatataatgc tgggcattta tcaactgctt tcccttanat tcagacctga 780  
gcttcagaat ccattctgagt tgcacagtca gtaaaatcct gctggaaccc agaagcagtc 840  
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<210> 3819

<211> 735

<212> DNA

<213> Homo sapiens

<400> 3819

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aaaaaataat gcttttcatt tgaactcctg tgcattttct ttttaactta tatgtgttcc 180  
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tgccatattc atcacgttat tataaacttc tgaaagaaag agaagatctt cctatatgga 660  
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<210> 3820

<211> 816

<212> DNA

<213> Homo sapiens

<400> 3820

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cacgaggggc cttcgccacc acgcactggg tcgtcacgga ggacgggaaa atccagcagc 180  
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 acctcattca tgaaggccta cagaagaaca ctccctcgtg ggtactgnat aacatggctt 720  
 cattttactg gagaattaag aatgagccat atcangtagt agaattgtgcc atgccagcac 780  
 ttcacttctc tttcaggcnc aattaaaaga canttg 816

<210> 3821

<211> 887

<212> DNA

<213> Homo sapiens

<400> 3821

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 tactttccaa agcaccttga gtgtgaaatg tcaacagaaa tatcagcaag cttttatggt 180  
 gcagagtatt atggtacctc tgaattagcc tgtatagttc tcttcctgct ttaagcatta 240  
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 caaaggagct cagttttcaa actttaatgg aaccttgggt aaagggaata aatttttaat 480  
 gaaatctggg gtttttatatt ttgattagcc taaaagtaaa aatacagctt tatccattaa 540  
 gtgactttta aaaatcagtt ttgccatacc aaagaaatta gattcttagt gtcacatgct 600  
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 catcagtttg tcttggtttt ggtaaggact tctgccagaa atgtgctcgt ggttgacaac 720  
 ccaggatcat tggatcaagt cttatgcaga cacctttgaa aacaattcag atcgtgtcac 780  
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<210> 3822

<211> 863

<212> DNA

<213> Homo sapiens

<400> 3822

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gtcagggatg gctcttcctc agggctctact gacattcagg gatgtggcca tagaattctc  180
tcaggaggag tggaaatgcc tggaccctgc tcagaggact ctatacagag acgtgatgct  240
ggagaattat aggaacctgg tctccctgga tacctcttcc aaatgcatga tgaagatggt  300
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aagtcatcac attggagata ctgcttcca ggaaattgag aaagatattc atgactttgt  420
gtttcagtgg caagaaaatg aaacaaatgg ccatgaagca ctcatgacaa aaatcaaaaa  480
gttgatgagt agtacagagc gacatgatca aaggcatgct ggaaacaaac ctattaaaaa  540
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gaaaattggt aatcaagttg agaaggccat caacgatgct ttctcagttt cagcatccca  660
acgaatttcc tgtaggccaa aaactcgtat ttctaataag tataggaata atttcctcca  720
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ttaggagaca aacagtntaa atg                                     863
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<210> 3823

<211> 835

<212> DNA

<213> Homo sapiens

<400> 3823

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 gtcgtectct acccctcaat cacagggacc acctcctact gtcagtcaaa tgttatctgt 180  
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 tccttcaaca ccaggtggta agcttattct cccagctcca cagattcctc cccctaataa 420  
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 ggtcccaagt gcaatgccac cctcaggggg agtaciaaact gtgcccattt cgaacttaca 600  
 aatattgcca ggtccactga tctcaaatag cccagcaacc atttccaag ggacttctgg 660  
 caaccaggta accataacag ttgtgcaaaa tacgaagttt tgcacctgca actgtgagtc 720  
 anggaaatgc aactcagctc attgcttcag canggaatta ccatgagcgg gaacgcagac 780  
 aggagttggg actttcagta caaacgcttt ncaagccact tnaggcattt tcctg 835

<210> 3824

<211> 562

<212> DNA

<213> Homo sapiens

<400> 3824

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 cgcccagcct gccgcctcgc tgtccctgcg gcttctgggg gtccagcaag actatgaatc 180  
 tctgttccaa atgctttgct gattttcaaa agaaacagcc agacgatgat tccgctccaa 240  
 gtacaagtaa cagccaatca gatttgtttt ccgaagagac caccagtgc aacaacaata 300  
 cctcgataac cagccaact cttagtccca gccagcagcc gcttccgaca gaactgaatg 360  
 taacttcacc gagtaaagag gagtgtgggc catgcacaga cacagctcat gtctcattaa 420  
 tcacaccaac aaaaagatcc tgtggtacag attcacagtc tgagaatgag gcttnaccag 480

taaaacggnc acgactactt gagaatacgg aacgggtccga ggaaaccagt cgatctaaac 540  
agaagagtcg acgtcngtgc tt 562

<210> 3825

<211> 831

<212> DNA

<213> Homo sapiens

<400> 3825

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agcgatggat cccaccgcgg gaagcaagaa ggagcctgga ggaggcgcgg cgactgagga 120  
gggcgtgaat aggatcgcag tgccaaagcc gccctccatt gaggaattca gcatagttaa 180  
gcccattagc cggggcgcct tcgggaaagt gtatctgggg cagaaaggcg gcaaattgta 240  
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gtctctccta catatatatg gttatittga tgaagagatg gctgtgaaat atatttctga 480  
agtagcactg gctctagact accttcacag acatggaatc atccacaggg acttgaaacc 540  
ggacaatatg cttatttcta atgagggtca tattaactg acggattttg gcctttcaaa 600  
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acctagacaa gattattcaa gaaccccagg acaagtgtta tcgcttatca actcgttggg 720  
atttaacaca ccaattgcag aaaaaaatca agaaccctgc aaacatcctt tcaacctgct 780  
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<210> 3826

<211> 539

<212> DNA

<213> Homo sapiens

<400> 3826

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 attacaaaga gacattttta caccaaatga tgaacgcctg ctgagcattg tgaatgtctg 180  
 canagcagga aaaaagaaaa agaactgttt tttatgtgcc acagtgacaa ctgaacgccc 240  
 tgtgcagggtt aagggtggta aagtcaagaa atccgataag ggagatttct aaaaaaggca 300  
 gattgcatgg gcccttcgag atcttgctgt ggtagatgcc aaagatgcta tcaaagaaaa 360  
 tcctgaattt gatttacact ttgaaaaaat atataaatgg gttgccagca gcactgctga 420  
 aaagaatgca tttatctcat gcatttgga attgaatcan cgatatctcc ggaagaaaat 480  
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<210> 3827

<211> 860

<212> DNA

<213> Homo sapiens

<400> 3827

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gggatattct gagtccccac cccaatcac tgacagctgg gccccttcat taagctacac 780  
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<210> 3828

<211> 850

<212> DNA

<213> Homo sapiens

<400> 3828

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ggctggccaa tgatttgctt ggaaaagact aaactctaca tggccaaata tgcagattac 180  
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ccatgttttg aaaggtgatt atttgtgaag ctgataaccc gaccagact gctttgtgac 780  
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<210> 3829

<211> 202

<212> DNA

<213> Homo sapiens

<400> 3829

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catgtagacc ccttgaagag gggaggggccc tagggagccg caccttgtca tgtaccatca  180
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<210> 3830

<211> 880

<212> DNA

<213> Homo sapiens

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<210> 3831

<211> 824

<212> DNA

<213> Homo sapiens

<400> 3831

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ccttctacca ctgagtggaa aacagattgg aaaggatcng gcactgactt tgaccctgc   780
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<210> 3832

<211> 828

<212> DNA

<213> Homo sapiens

<400> 3832

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<210> 3833

<211> 797

<212> DNA

<213> Homo sapiens

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<210> 3834

<211> 602

<212> DNA

<213> Homo sapiens

<400> 3834

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 acaactgtc agagtgcgag ggcgggatag ctgtccaagg tctccccag cactgaggag 180  
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<210> 3835

<211> 869

<212> DNA

<213> Homo sapiens

<400> 3835

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accaatttaa gaactacgag cgtcagaagg tgttcctaga ggagctgatg gcaccagtgg	480
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<210> 3836

<211> 806

<212> DNA

<213> Homo sapiens

<400> 3836

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gttccaaaag cagctcagga ttgatgaca aatgggttatg tctcccttca agagaaagac	360

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<210> 3837

<211> 870

<212> DNA

<213> Homo sapiens

<400> 3837

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 gcgcaggggc aggcgggcgg cgccagagct ccatgggaca gctggggaag ctccaggcta 180  
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870

<210> 3838

<211> 843

<212> DNA

<213> Homo sapiens

<400> 3838

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tgg 843

<210> 3839

<211> 794

<212> DNA

<213> Homo sapiens

<400> 3839

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aaccatcttc	ccgggcagct	tcccctactc	gttccagctc	cagtgcctagt	cagagtaacc	300
acagctgtac	atccatgcc	tcttctccag	ccaccccagc	cagtgggaacc	aagacttcac	360
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tttactgct	ccaaggagc	gggtaatgag	agtggcactt	antgtgatgc	ccaaaaagac	720
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<210> 3840

<211> 754

<212> DNA

<213> Homo sapiens

<400> 3840

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ctaccagcgc	agctgggttaa	aggtgactga	ttacatcgca	gagaagaatc	tacctgtgtt	360
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cttcaatgat ggcctcgaag aactgtgcaa aatccagaag gcctgggcta ttccagacac 480  
 agagcanagg gacaggattc gccaggccca gaagaccatt gtcaaggaga cctacggggc 540  
 ctttctacag aagtttggca acgtgccctt caccaagaac ccggagaagt acatcaagta 600  
 cggggtggag caagtgggcg acatgatcga tcgccttttc gacacctctg ctgagcctgc 660  
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<210> 3841

<211> 794

<212> DNA

<213> Homo sapiens

<400> 3841

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 tcctcccgcg cgggcctgca gttcccgtg ggccgagtgac acagactgct gcgcaaaggg 180  
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 cttacggcgg agatcctgga gctggctggc aacgccgcgc gtgacaaca gaagaccagg 300  
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 gaaggaaacg ttcaataagt gagtcatgag gtttggaat tcgttcccct gacagtcata 720  
 ttgcataaca ttgcaacgcc nttantcgtg ggntaaatat gcttgagctt ttaaagtgat 780  
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<210> 3842

<211> 766

<212> DNA

<213> Homo sapiens

<400> 3842

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gcattccttc ggcccgtagg ctgatctggg gcgggaagta ttagcgtctc agttgcgctg  180
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atagaacagt tattgtgtgg gatggtgata ctaccagaca agttcagaga atatcatgct  660
tccagtctac tgtaaagtgt ttaactgttc ttcagagact anatgtttgg ctttctggtg  720
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<210> 3843

<211> 811

<212> DNA

<213> Homo sapiens

<400> 3843

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gaggagatgc tgcagctcag ccagcagctg gatgcctctg agcagcacia agccctgctt  180
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tgcgaagaca agaggaggca ggatgaagaa gaggcccagg taaagctgca agaggcacag 420  
atgcagcagg gaccagaggc ccacaaagag cccccagctc ccagccaggg cccaggaggg 480  
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agtcaggcca aanagataaa gatggacctc cagaaggctg ctaccatccc agtgagcaaa 660  
tctctacat tgcangctca aaactgaagg anatcttgac aagattcaaa agcctgctct 720  
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<210> 3844

<211> 594

<212> DNA

<213> Homo sapiens

<400> 3844

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gctggcagcc cgggtgccgag ccccggtgca acgctgcgcc gggctctccgt ttccccaggc 180  
caagccagcc ccttggtcac ccccgaggag agcagggtgag gaagggcccc tgggctgtgg 240  
ccctgccctc aagtcacgtg ctgattttag ctccagcacc tccccagtt ttaaggcaag 300  
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tcccggcaga gtgagtgtgg ccctgacagc ggggaggggg cgggcaagcc ggcccaacct 540  
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<210> 3845



<211> 528

<212> DNA

<213> Homo sapiens

<400> 3845

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tggaatctca ccactgaaaa aaagcacacc cttttaagac tactttatga ggcacttgtg  180
gattgtaaga agagtgatgc tgcttcaaaa gtcattgggtg aattgctcgg aagttacaca  240
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gtagatacta aaattcaagg ttgatattg gaagaactgt ggattgaata tgaagtagct  480
gcatggcggt tacctggcgg gggggggtat tgctggtatg gggatnnn          528
    
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<210> 3846

<211> 672

<212> DNA

<213> Homo sapiens

<400> 3846

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ccaaccactg cccggaggag gtagtggagg cgagcccggg gttaatgagc cccgaaggcc  180
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<210> 3847

<211> 636

<212> DNA

<213> Homo sapiens

<400> 3847

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<210> 3848

<211> 838

<212> DNA

<213> Homo sapiens

<400> 3848

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 aaaagaactc taatagtaaa ggaaaggga atattggtgg tatgtacca caaaaccccc 240  
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 ttttaattta aacatgggaa aagatttttt canaattaca tactaagaat gtaaaattaa 780  
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<210> 3849

<211> 716

<212> DNA

<213> Homo sapiens

<400> 3849

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 cactggtctc agggagacag agaaggatac caaagaagaa gtaactatta tgaggggcca 180  
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 ccagaacaca ctgctacaag gtcccagatg gccacgtctc tggattttta aacttatgta 300  
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cagaacttcc tgctgactgc tcagtccact cccaacaata ctgtgtggaa gattgcaagt 660  
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<210> 3850

<211> 588

<212> DNA

<213> Homo sapiens

<400> 3850

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tcaagccttg aacattagaa tatacacacc caaatatata tacacacctt gtgacacagg 420  
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cacgagtggg nctctgtctc atgtaattcc agagcccagg tgcttaagtc atactcnagt 540  
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<210> 3851

<211> 850

<212> DNA

<213> Homo sapiens

<400> 3851

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 aggcctttgc agatgctgtt ggtgaaagag ggtgtgcaga atgctaagac cgatgtttgt 180  
 gtcaactccg ttcccttggga tctcgtgctt agtagagggc ctctttctaa gtccctcttg 240  
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 agcatgggca cagtgtctca aaccagcagc tggaatctgg actgtcgcta tgtgcttcac 360  
 gtggtagctc cggagtggag aaatggtagc acatcttcac tcaagataat ggaagacata 420  
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 cacccgagtg atcatganaa tattcaggca ttttcagatg aatttgccaa aagggttaat 660  
 ggaaatctcc gtcaagtac aaaattccga agggctaaag atacacaang gtttttaagg 720  
 ggactgtttc caanccctga ttcaagggtg gtatgaaatg gaagattggg tccatcatct 780  
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<210> 3852

<211> 627

<212> DNA

<213> Homo sapiens

<400> 3852

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 ccgggcccgc gccgccgccc cccggctccg ctgcggccc ctctgtctgc aggcgtgccc 120  
 cggcggcggc ggagagccgt cctcggccga ggaggctggg aaacgcgagc gcaggcggca 180  
 gagaggcctc aacgccgtcc ctttcgccac cgccttttcc ttgcctcgcg ccgctgtgca 240  
 tttctctcct tttcctttgt ttttttgcc cctcgcgggt gtgggcattg ttggttagca 300  
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 gccagccttc nagagctatg agtccatgga gcttgcctgc cccgctgagc gcancggcca 420  
 cgtanccgctc agcgacgggc gccacatgtt cgtctggggc ggctacaaca gtaatcaagt 480

cagaggatta tatgactttt atctgcctan agaagaacta tggatctaca acatggagan 540  
 tggaagatgg aaaaaaatca acactgantg tgatgttcct ctttctatgt catgaagctg 600  
 tgctgtgtgt gtanacaggt gctgtac 627

<210> 3853

<211> 772

<212> DNA

<213> Homo sapiens

<400> 3853

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 tttatataag tatagtatat atttatttag cagaataaat gtttatgggt gaaaatggct 180  
 gggattatag ttgtgagcca ttgtgcctgg cctattttca gtatttttgt ttaaattttg 240  
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 ttataggact atttaactat atattgagta aaatctatgc tatgtcaagt tttattcagt 360  
 tgtccctagt agaatatatt tctcttttaa tctgtatac agtatgagta actccagttt 420  
 aaaacactgg tattttaatg agtttaaat gtactgttat atattatgat acatattttt 480  
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 tacctgtgaa atgggtggtaa taatttgatt ctttattcta ttttgattgt agctcctttt 660  
 gtaagggagc atttgtaaaa ttttaagttgc ttttagagta tacaaaatcc ttttattacc 720  
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<210> 3854

<211> 729

<212> DNA

<213> Homo sapiens

<400> 3854

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gtctcgcctc ccgcgcgccg gtagattggt tgtttcatta tggatggagg ggatgatggt	180
aaccttatta tcaaaaagag gtttgtgtct gaggcagaac tagatgaacg gcgcaaaagg	240
aggcaagaag aatgggagaa agttcgaaaa cctgaagatc canaagaatg tccagaggag	300
gtttatgacc ctcgatctct atatgaaagg ctacaggaac agaaggacag gaagcagcag	360
gagtacnagg aacagttcaa attcaaaaac atggtaagag gcttagatga agatgagacc	420
aacttccttg atgaggtttc tcgacagcan gaactaatag aaaagcaacg aagagaanaa	480
gaactgaaag aactgaaggg aatacaagaa ataacctcaa gaaggttgga atttctcaag	540
agaacaagaa ggaanttgga aaagaaactg actgtgaagc ctatagaaac caagancaag	600
ttctcccagg cgaagctgtt ggcaggagct gtgaagcata agagctcaga gagtggcaac	660
agtgtgaaaa gactgaaacc gggaccctga gccangatga cangaatcag gagccctcaa	720
cntgcaaag	729

<210> 3855

<211> 277

<212> DNA

<213> Homo sapiens

<400> 3855

acttaancgg gatggaacgg aacgggaggc cccggctggt ggcaggtcg cctgctgctg	60
atacaggaag ggacaaaggg ctcgacgat tccggtcttt ccttagctgc tctccttgca	120
agctctttca tccccatggg tctcttgatg agtccaacaa gacgggcatg gagcccgatc	180
tcacagatgg ggaagctgat gccagcggca gcttccccca gcacagaaga nagctcctgg	240
nattccagca aggggtgact ggaacnaaaa ccaggga	277

<210> 3856

<211> 712

<212> DNA

<213> Homo sapiens

<400> 3856

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ctgaaggaaa agacagtgtg gtcctgcaaa acattttgag gtacattggt ttgtctcagc 120  
tattttgtag cagactcgtg cccccattag tgtgcctctt tggaaattat cgcccacatt 180  
tgtaatatag tcgccattga aaagttaatt atcctttttt tagggatttt gatgtcattt 240  
cttttttttt ttttaataaaa aggttgaact gttttttttt tttttctttt tgggtattaag 300  
tccatcttgt gttggtacat tggcagagac atatgcttta aaaacttaaa tatttcggag 360  
gcacatgttg gactactttg ttttaattaa actgctagta tttctttgtc aaggatgttt 420  
ctagtttttt gctttattgc cttgcattct aatgcagttt gttctgtaac tcgagagcca 480  
gtagcattgg attgatggaa agtgtanggt ttatgaatta ttgcaagctg actaccatac 540  
ctcacacagc gttggtgttg tgaagcggcc catgaaaagc caaattaaaa atcaaggatt 600  
cagtcaaact aagcaggtac tcaagccaag tactcctttc nnaacccaaa tccaangttt 660  
ggaaatggcc aaattggccc tggtgaaatc ctttaaccgc cctttaaaac cc 712

<210> 3857

<211> 721

<212> DNA

<213> Homo sapiens

<400> 3857

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gtgatatttt cctgttgcca aggctggagt gcagtggcac gatctcagct cactgcaacc 120  
tccatctccc aggttcaagc gattctcctg cctcagcctc cccgagtagc tggaattaca 180  
ggcgtgggcc accacgcca gctaattttt tttttatttt ttagtggaga tggggtttca 240  
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ccaaagtgtt gggattacag gcatgggcca ctgtgtccag ccaaataaag tcagttttta 360



tgaacatagg ttcattggtg gccatagggt aagtttttat acagttggta ttaatcaaca 420  
 ggaaattata atgcaaactg catatactct taaaaacttt tctggaactg agtggatcct 480  
 gaaaataaaa atgattgtta agatatttca aaggattatt gtaaatttcc aaattctgtt 540  
 ttttaattct ttacttttaa tcataaagta taccatctat ttgaaaacag gtataccaca 600  
 atgtacctac ttcattagngt tgctatataa tgcgaagaac aatgcttaac acatcgtaag 660  
 tatgcgatta aatgtcacca ntgcccttga nttggttaag caccttttaa ggcacaccca 720  
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<210> 3858

<211> 746

<212> DNA

<213> Homo sapiens

<400> 3858

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 aagcacccca aatctgaaaa gattcttgggt aattttattcc ctttcatccc taaagaggag 120  
 cctttaagat atgtcagggt tgatcttttt ttcagaacct aatgtgtaga tattcagaaa 180  
 tgactctgga agacaaaaat ttggattgtc agaaggaggc tgctcatata attaattgcca 240  
 tgtaagtaat tgctttgttt ttaaaaagcc catcgagtgt aaatgttaaa tgtatttgtc 300  
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 tgccaagaaa ttaaggagct tcaggaactt ggtgttccaa agccctttac cccaggtgggt 420  
 agcaaattga aatcatgaaa gttaaacca ctgcacagct tacagatctg cagggttagct 480  
 ctgcagttgc cttgcaagga tatagagaag ttaatatctc aaatatttag taacatttat 540  
 gctaattgagc cttccataat aaccataaat ggctttcaca tgttgtttgt ttaatgtgaa 600  
 ctggcagagt atctattgac aagaaaacat tgtggagtcc tgagacaatt gaaaataagc 660  
 cgaaattcac tttcctgaaa tatacattcc ttcacataag aactaaacan tgtattcccc 720  
 aaagaaacat aattanttcc cngatc 746

<210> 3859

<211> 767

<212> DNA

<213> Homo sapiens

<400> 3859

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gccgggtatt gtgggactga ataacataaa ggccaatgat tatgccaacg ctgtccttca 120  
ggctctatct aatgttcttc ctctccggaa ctactttctg gaagaagaca attataagaa 180  
catcaaacgt cctccagggg atatcatgtt cttgttggtc cagcgttttg gagagctgat 240  
gagaaagctc tggaaccctc gaaatttcag ggcacatgtg tctcccatg agatgcttca 300  
ggcagttgta ctttgcagta agaagacttt tcagatcacc aaacaaggag atggcgttga 360  
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gaagactatt gtgactgatg tttccaggg gtccatgagg atcttcacta aaaagcttcc 480  
ccatcctgat ctgccagcag aagaaaaaga gcagttgctc cataatgacg agtaccagga 540  
gacaatgggtg gagtccactt ttatgtacct gacgttggac cttcctactg cccccctcta 600  
caaggacgag aaggagcagc tcatcattcc ccaagtgcc a ctttcaaca tcctggctaa 660  
gttcaatggc atcactgana aggaatataa gacttacaag gagaactttc tgaagcgctt 720  
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<210> 3860

<211> 782

<212> DNA

<213> Homo sapiens

<400> 3860

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atctcacaag cgtacgggtct gatgaatgaa ctgttatctg agtcagtaca gctaccaact 120  
ctaccacaga aaccattgcc taacaaaccc agccctactc agtcttccag ttgtcaacac 180  
tgcccttctc caagaggaga gaatcaacat ggtcacagtt ttctaataaa tcgacctgga 240

aaagtcaaat atatgtccaa accgagttat atccataaga ggaagtcttt tgggcaacct 300  
 caaggctcac cttggccaca tggaactgcc actttcacca tacagaaaaa agctgggtgga 360  
 gccaaagcag cagtaagaaa ggctacgcag tctccagtta ccttccaaaa aggctctaata 420  
 gctccgtgtc atagtctgca gcatacaaaa aaacatggaa gtgctgggct tgcacctcaa 480  
 accaagcagg tgtgtgtaga gtatgaaaga gaggagactg tggtagagtc ctggacgata 540  
 ccttcagaaa tccataagat tcttcatgag agtcacaatt cccttctaca agacttgtct 600  
 ccaactgaag aggaagagcc agagcatcct ttgggggtgg gcggtgtgga cagcgtgtct 660  
 gagagcactg gcagcatcct cagcaagctg gactggaatg ccatcgaagg acatgggtggg 720  
 ccagcgtgga ngaccanggg cctgtctgtc cacnggggcc ctgggacctg taagaacctg 780  
 gg 782

<210> 3861

<211> 810

<212> DNA

<213> Homo sapiens

<400> 3861

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 tggacagcat ttctgtgaac acatctttgg atcaaaactc cagcaaacat ggtgctat 120  
 caagtggttt caggctggaa gagtctccat ttgttccta tgactttatg aacagcagta 180  
 cttcaccagc cagtcctcca ggttcaatag gagatggctg gccacgtgcc aaatcgcta 240  
 acggctctag cagtgttaat tggccaccag aatttcgtcc tggtagacca tggaaagggt 300  
 atccaaacat tgaccctgaa actgaccctt acgtcactcc tggcagtgtc ataaacaatc 360  
 ttcaattaa tactgtgcgg gaagttgacc acctcaggga caggaacagt gggtcacatcct 420  
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 acaacgttcc cctcagcagt acagcacaaa gcacttcagc cagaaatagt gattccaaat 540  
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 cctttgccac ctaaaaacat cactgctccg tcccgccac ctccgggact gactgggtca 660  
 gaagccancc ttgtctacgt gggataattc tccccttcgt anaggtggag ggatggggga 720

aattctgacg ccagatatac cccaagttcc agctggggtg agaagcagct caaggagaat 780  
aacaaattgg gcttggttcc naaaaannag 810

<210> 3862

<211> 706

<212> DNA

<213> Homo sapiens

<400> 3862

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caatatttaa ggatagaaat ctctgaaagc agagttaata ttagttgccc agaattgtact 120  
gaacggttta atcccatga tattcgcttg atattaagtg atgatgtctt gatggaaaaa 180  
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gtcccgact gtggatatgc tgtgatagca ttiggtatgtg ccagctgtcc aaaattaact 300  
tgtgggcgag agggctgttg aacagagttt tgctaccact gtaaacagat ttggcacccc 360  
aaccagacct gtgatgctgc tcgacaagag agagcccaga gcttacgttt gagaactata 420  
cgctcttcat ccattagtta tagtcaagag tctggagcag cagctgatga tataaagcca 480  
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tgtgctgttt gtggttgtga gttttgttgg ntgtgtatga aagaaatctc aaatttgcatt 600  
taactaantc catcangatg tacttttggg ggaagaaaac ctggagccga aagaagaaat 660  
attgtggcaa ctggggaaca ctgggttgn gctcctgtcg gaatcc 706

<210> 3863

<211> 719

<212> DNA

<213> Homo sapiens

<400> 3863

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aggtgcttgc cttagagcaa gggaaacagc tctcattcaa aggaactaga agcctctccc 120  
 tcagtggtag ggagacagcc aggagcggtt ttctgggaac tgtgggatgt gcccttgggg 180  
 gcccagaaaa acagaaggaa gatgctcctg ctgctgtcct atgacctctt tgtcaattcc 240  
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 tctcaaactc ctgagctcaa gcaattctcc tgcttctgcc tccaagctc aagcaattct 600  
 cctgcttctg cctcccaaag tgctggaata caggcatgag tcaactgtgcc ccggcctgaa 660  
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<210> 3864

<211> 805

<212> DNA

<213> Homo sapiens

<400> 3864

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 aaactttccc ttataattta acaaaagatt tcattcacat tggcaattgt tcattaataa 120  
 ccaaaacaat aagtaacctt atttcgcaag acctaagaaa attggcacta ggttctttta 180  
 tacattttta ctgtactgga ctacagcgta agtttcagaa attttacttc tattttttga 240  
 aggtacatag tgtaactgct taagatcaat ttggatttca ttttcatcgt aaaaatgtct 300  
 tgataaattc catacactgt agaataagcc ttctactaag gctggcatca acataaatgc 360  
 agttattgca tatctggcaa aaagagggtca ttaacagaaa aaaatgacta gccattcaat 420  
 gagacaaata aaaatacaaa aagttataat ctcatcttgg aacacattat ttactatgaa 480  
 cagaaatttc ttattagccc tcaacactgt catctggtaa tggctccaga cagtactttc 540  
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 aagcaaatca tgcctggagg agaaaaaaga agctaaaang taaatangga atgaattaaa 660

aactagacta tggatatgctg aatgagaaat atagtaagta tatttaataca taacctgata 720  
 attacnttaa tggggccacg aaaataatgg atttactaca tttccttgaa gaaaatattt 780  
 caatncctaa ggaancctaa ccttt 805

<210> 3865

<211> 781

<212> DNA

<213> Homo sapiens

<400> 3865

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 agcgccttag ggaggtgatg gagagagttc tggctggggc accttccttg ctccccctga 120  
 gtagcactaa gtaatctcac aggacaggca aggcctttct gaagaggtct tagagtgcag 180  
 ggaattgcat gacaggtgct gttagccacc ttggaagaac tgcaggcctt gcgtggtgcc 240  
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 atagcagtac caatTTTTat tgtaggata agttgtagga gaaattagca aaggttact 360  
 gactgctgtg ggtagacagt acaattcttc ttcagtttct gacttaggag tgtttccgaa 420  
 aagttaagtg aaaacaaaag tttgaagtgt ttccctttta gttacataac agacactcat 480  
 tacggaattg aacagtttta gaccataaaa taattaagtt aaaagcataa caaaatcctg 540  
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 agatgtctac tgagaacaca gtattanggg atgtgggtgg gaanaaagat gcaatgggca 720  
 aagcctcaac ctgggcgaac tggggcaagc tcgctctctc aaggcaacaa gtnaaggaaa 780  
 g 781

<210> 3866

<211> 674

<212> DNA

<213> Homo sapiens

<400> 3866

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 tgggcctgga gcanctgcgg cggctcgggg tgctctactg gaagctggat gctgacaaat 180  
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 tcataacat atgcaaagat aaactaccaa attatgaaga aaagattaag atgttctacg 300  
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 aagcccgcgg gcagtacgtg aaatttctgg cacagaccgc ctancantgc tgcctgggaa 600  
 ctaacacgtg cctcgtaaag gtccccaatg taatgactga gcagaaaatc aatcactttc 660  
 nctttgcttt taaa 674

<210> 3867

<211> 670

<212> DNA

<213> Homo sapiens

<400> 3867

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 cgggggaggc ggccaccagc ccggcggagg agacagtggg gtggagcccc gaggtggagg 180  
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 cattcccga tccagagagg aacttcgtcc ttccagaaga gatcattcag gaggtccgag 420  
 aaggaaaagt gatgatagaa naggagatga aagaggagat gaaggaagac gtggaccccc 480

acaatggggc tgacgatgtt ttttcatctt cagggaagtt tggggaaagc atcagaaaat 540  
tccagcaaag acaaagagaa gaactcctca gacttggggt gcaaagaagg ccanacaaac 600  
ggaagcgcaa ccgggggtcac cnacaaagtc ctgaccgcaa acagcaaccc ttcaattcca 660  
ntgctgccaa 670

<210> 3868

<211> 711

<212> DNA

<213> Homo sapiens

<400> 3868

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gaacttacta agggggcccag agcactgttg gaagtctggt tagagtcccc agagagttac 120  
tctaagttaa aatgagccac tgaccttggc tcaccttaga ggaatttcct cgagaacaac 180  
agagataaga aaagaaccag cctggccaat ccttcaacag ctctagagcc ctttttctct 240  
gctggcaggg gctttgttta ccagctcact gtttaggcta aatgttaggg accagatcac 300  
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caattagcct ggcaagggtga ctcatgcttg taatcccagc actttgggag ggcaaggcaa 540  
gcggatcacc tgaggtcagg agtttgagac cagcctcacc aacatggnaa aaccccatct 600  
ctactaaaaa aatacaanat taaccagggg tgatggcaca ttcctgtaat cccagctact 660  
cgggaagccg aggcaagaga atcgcttgaa cccggggaag gaaaaggntn a 711

<210> 3869

<211> 711

<212> DNA

<213> Homo sapiens



<400> 3869

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 gaaaagtccc gggatgcggc ccgcagccgg cgcagccagg agaccgaggt gctgtaccag 120  
 ctggctcaca cgctgccctt cggccgcggc gtcagcgccc acctggacaa ggcctctatc 180  
 atgcgcctca ccatcagcta cctgcgcatg caccgcctct gcgccgcagg ggagtggaaac 240  
 caggtgggag cagggggaga accactggat gcctgtctacc tgaaggccct ggagggttc 300  
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 gagggcccca cggagcggtg cttctccttg cgcatgaaga gtacgtcac caagccgcgg 540  
 gcgcaccctc aacctcaagg cggccacctg gaaagtgtg aactgtctg gacatatgag 600  
 ggcctacaag ccacctgtgc aaacttctcc anctgggaac cctgactcaa angccccgc 660  
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<210> 3870

<211> 624

<212> DNA

<213> Homo sapiens

<400> 3870

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 gggggcgggc cgagcccga ggcagatgt gcggacacag cccacgcgc ggggccatgc 180  
 aggtggccat gaacggtaag gcccgcaaag aggcggtgca gactgcggct aaggaaactcc 240  
 tcaagtctgt gaaccggagt cctctcctt tccatgtgt ggctgaatgc cgcaaccgcc 300  
 ttctccaggc tggcttcagt gaactcaagg agactgagaa atggaatatt aagcccagaga 360  
 gcaagtactt catgaccagg aactcctcca ccatcatagc ttttgctgta gggggccagt 420  
 acgttcctgg caatggcttc agcctcatcg gggccacac ggacagcccc tgcctccggg 480  
 tgaaacgtcg gtctcgccgc agccaagggt ggcttcagc aagtcngtgt ggagacctat 540

ggtaggtggga tctggagcac ctggtttgac cgtgacctga ctctggctgg acgcgtcatt 600  
gtcaagtgcc ctacctcang tcng 624

<210> 3871

<211> 699

<212> DNA

<213> Homo sapiens

<400> 3871

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atatacttcg taacactcag tttcagttac agtcactgac tgatgtagtt ctgctggcac 120  
ctgacagctc tcagttacta agcttctgcg atatgctagg cactgtgctg gatgataaga 180  
cagcaccctt gccctctaga agctcgggca gttaaaatgg agcagaggga agcaacggag 240  
actcagaaaa taactataca cactaaggga gagcttggtc tggggctggt gaataggaat 300  
ctgttaggga agtgacagat gcaaagctgg aaatgttaat cagatggcta aattcaggcc 360  
aaaatttaaa tatcttcaat tttcaactca agaaaggcat ttggcagaaa ccatgttttg 420  
aaaagaaatt aaaatttaca agaattttta ttaagcactt tgcctagcaa aagatttttg 480  
ttaaaaaaaaa aaaaaaaaaac ttgtcatccc tactttcagg gagtagaatc ctggaatttt 540  
tgaancatac tgtaagatgg tgattatata tcaaaagggg ttccgtggtg tctgtaccct 600  
ctctgccaca ggcaatactg agcaccatag gcttgagtat gccatttaac tgtttggttt 660  
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<210> 3872

<211> 653

<212> DNA

<213> Homo sapiens

<400> 3872

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tttccacgga ccctcctgcc tgggccgcag ccgccgccgc gatgccagct aagttcagct 120  
gccggcagct ccgggaggcg ggccagtgtt tcgagagttt cctggtcgtt cggggactgg 180  
acatggagac agatcgcgag cggctgcgga ccatttataa ccgcgacttc aagatcagct 240  
ttgggacccc cgccccctggc ttctcctcca tgctgtatgg aatgaagatt gcaaactctgg 300  
cctacgtcac caagactcgg gtcaggttct tcagactcga ccgctgggcc gacgtgcggt 360  
tcccagaaaa gaggagaatg aagctggggg cagatatcag canacaccac aagtcactgc 420  
tagccaagat cttttatgac agggctgagt atcttcattg gaaacatggt gtggatgtgg 480  
aagtccaagg gccccatgaa gcccagatg ggcagctcct tatccgcctg gatttgaacc 540  
gcaaagaggt gctgaccctg angcttcgga atggcggaac ccaatctgtt accctcactc 600  
anctcttccc actctgccgg acaccccagt ttgctttcta caatgaaana cca 653

<210> 3873

<211> 632

<212> DNA

<213> Homo sapiens

<400> 3873

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cagattccgt cacagagaag tggccatct gtccaggttg aggaatgggc tgaacgtgtt 120  
ggagctgtgg catggcgta catatgcatt taaggacctg tccctgtcct gcacaacaca 180  
gttcctgcag tacttcctgg agaagaggga gaagcacgtc actgtggttg taggaacatc 240  
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cgttctgtg cccaaaggtc actgcacaaa gattcaggag ctccagatga caacggtgct 360  
gaagcagaac gtacatgtgt ttggagtga gggaaacagc gatgagctcg atgagccgat 420  
caagactgtg tttgccgatg tggcttttgt caagatangc ctgcccattc gtctggctgt 480  
ggcagtgaac cgcaatgaca tcatccacag gactgtccan caggagact tctctctctc 540  
tgaggctgtt aaatcaacct tggnatcagc tatgggcatt caagtgcctt acaacatgga 600  
naagggtgtc tggctgtctt ctggncttga ca 632

<210> 3874

<211> 733

<212> DNA

<213> Homo sapiens

<400> 3874

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 ccttcaggct ggacggcgcg ggtcagccct ggttcgccgg ctctcgggtc tttgaacagc 180  
 cgcgatgtcg atcttcaccc ccaccaacca gatccgccta accaatgtgg ccgtgggtacg 240  
 gatgaagcgt gccgggaagc gcttcgaaat cgcctgctac aaaaacaagg tcgtcggctg 300  
 gcggagcggc gtggaaaaag acctcgatga agttctgcag acccactcag tgtttgtaaa 360  
 tgtttctaaa ggtcaggttg ccaaaaagga agatctcatc agtgcgtttg gaacagatga 420  
 ccaaactgaa atctgtaagc agattttgac taaaggagaa gttcaagtat cagataaaga 480  
 aagacacaca caactggagc agatgttttag ggacattgca actattgtgg cagacaaatg 540  
 tgtgaatcct gaaacaaaga gaccatacac cgtgacctt attgagagag ccatgaagga 600  
 catccactat tcggtgaaaa ccaacaaaga gtacaaaaca gcaagctttg gaagtgataa 660  
 aagcagttta aaaggagaaa aatgaanatt anaaacgttg ctcaaaatga aggcttccgg 720  
 ttcaaccttc can 733

<210> 3875

<211> 761

<212> DNA

<213> Homo sapiens

<400> 3875

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 agtcaacact tgccacgagc ggctagactt aggacaggca agttgccctg ccatccttct 120  
 atcgccccca cccctccttt acttaagggc gatggcagag acgtcctcct ccccttctc 180

ctcctctttg gtgcctccag ccaggaggcg ggagcgatcc acagcagctg acccagctca 240  
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 cagcagcgac gacgcgggcg gcggccccag cgactcgcaa ctgcctccct gaccacagcg 360  
 gccaccgccc aacacccccg agaagccatc gccaccaccg gcaggagaac ctaggggtcca 420  
 taaagccatc ttcgcgatcg actaaagcta cgtcaacaac tatggcgggc gacgggcggc 480  
 gggcagaggc ggtgcgggaa ggatgggggtg tgtacgtcac cccaggggc cccatccgag 540  
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 ctcctccgtc gcgccagggc cggcgggaag tgaggttctc ggacgaagcc gccagaagtg 660  
 tacggggact tcgagcccct ggtggncaaa gaaaggtccc cggtggggaa aacgaacccg 720  
 gctagaaaaa gttccgggtcc gantttctgcg aaaagaggaa n 761

<210> 3876

<211> 747

<212> DNA

<213> Homo sapiens

<400> 3876

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 ctatcccaat aaggtactat gccataatgg tgaccatggt cttcaccgtg agcgtggtga 120  
 acaactatgc cctgaatctc aacattgcca tgcccctgca tatgatattt agatccggtt 180  
 ctctaattgc caacatgatt ctaggaatta tcattttgaa gaaaagatac agtatattca 240  
 aatatacctc cattgccctg gtgtctgtgg ggatatttat ttgcactttt atgtcagcaa 300  
 agcaggtgac ttcccagtc agcttgagtg agaatgatgg attccaggca tttgtgtggt 360  
 ggttactagg tattggggca ttgacttttg ctcttctgat gtcagcaagg atggggatat 420  
 tccaagagac tctctacaaa cgatttgggg aacactccaa ggaggctttg ttttataatc 480  
 acgcccttcc acttccgggt ttcgtcttct tggcttctga tatttatgac catgcagttc 540  
 tattcaataa gtctgagtta tatgaaattc ccgtcatcgg agtgaccctg cccatcatgt 600  
 ggttctacct cctcatgaac atcatcactc aagactccta cttactggg gagagaaatg 660  
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atnaagatac ggtttgntta caaagag

747

<210> 3877

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3877

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 ctcccaccag tcctgaaaat agttcattca agtggtaaaa taagacaagg cagaggacga 180  
 tgtctctaac ttccctgatg tgagatctaa agccccattc ctaactcttg gttttagaat 240  
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 gggttgaaaa taaggtttca ggggatggaa gcaactttga ggaacataaa gaggtattgg 360  
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 tgtcacttta attgccccac tgattgataa gaagtagtta tttctaattg acactttttt 540  
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 ttatcaagtc tcccccaaaa aggactctgc ctaattttgt tgaanaagac aaaggaagtg 660  
 aaggaaacca aataaaaaat caatctcaag ggattttaat tantaaaggg acactttggg 720  
 nttaaa 726

<210> 3878

<211> 712

<212> DNA

<213> Homo sapiens

<400> 3878

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gttccccga agttcagagt gaagacattt ccacctggac acctgaccat gtgcctgccc 120  
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ggaccctcgg cagttggcag gctccctctg cagtggggtc tgggcctcgg ccccaccatg 240  
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gctgacaagg ccactgcggc tgcagccgct gcctccctgt tggccaatgg gcatgacctg 600  
gcggcgggca tggcggtggn caaaagcaac cctacctcaa agcacaaaag ttggtgctgt 660  
tggccaacct gctgagcaaa ggcaaaaccg ggccacggga gcttgnaan cc 712

<210> 3879

<211> 680

<212> DNA

<213> Homo sapiens

<400> 3879

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cacagaggta ccataagacc agtcaaaggc cctcagacat ccacttcgcc tgccagtcct 180  
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ttttagctc agccaacag agcccagnga canaggcaga gccccacagg ggtgncaccc 540  
cctctgagtc ccattcgctt cacctatctt ctatggccgc cccatagcca tactgccccat 600  
tagcgtggcc gccangcatt acagctcaga ggcatcgccg ctacaaagct ttgnggcat 660

cagngccgct cagtgtgcgg

680

<210> 3880

<211> 630

<212> DNA

<213> Homo sapiens

<400> 3880

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aaatacttct caaacaagct agtactttgg cagatctgga cagtggaaat atggaaaaag 120  
tcattaaaga tgaaaatggt actctgtatg tgtgggcaaa cctcaagaag aatccaaggc 180  
acagaagtgt tagattctct gaaacacaaa ttggatttga gattccaagg atattagcaa 240  
caagtgcacat tgctgtacga ctccctgcata cccactatga tcatgtttct gcactgcacc 300  
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gaggggtctca ctttaattcag gaggaagaaa taaaagttga ggaggaacaa ggtgatattg 480  
aagtgaaaat gagttctgct gaggaagaat ctgaagccat aaaatgtgaa cgagagatga 540  
aagtattaag tgaaactggt tcancaacac aattgttgcc gggaaaagaa atcctccgga 600  
aaagncaana tttctttgaa gacaatgtgg 630

<210> 3881

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3881

gatcaataat tgcaatcagc ctgtcagaat acgtaaaggg aatccatgta attcacaggc 60  
gggagttggt atttctgtag taaagacctg actgcagcat ttacacatga taaataggaa 120  
atggcaaacc tggggaagca agtttgaact caatctggaa gtaatagcct aagcagcttg 180



ctcttcacac tgtgtttccc atgtcaccct tttcctctta ggtatcttgc ttctccctct 240  
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tctgacacaa tgactcagct agtttaagag aatggattta ttttgaagtc tgaaaatgtt 360  
tctgtgatat tttgcttttt actgatcttt aangcaactc acagaagtgt attagcctta 420  
gatacgtaat cacccttga gatataatgt caacagtaca cactgacatg ttcatagtaa 480  
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caaagcctat gttcttaagc atgtacaaa atcacattta nttcattaat ccatttactc 600  
attaccaag aatgtaacaa aatttagtga atatctgcta tgtgtcaggc acttttcttg 660  
gctcctgata tacaaatgat attcaaataa aactcaaaan cctggtaagg ggaaggtang 720  
gagacaaant atgtacc 737

<210> 3882

<211> 789

<212> DNA

<213> Homo sapiens

<400> 3882

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cccgcgctcc tggggccccc ccgggccctc tcatcgctgg cagccaaaat gggggagtat 180  
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caagtgggcc ccttgnctac aggagccccc cacctttcct tgcccaagaa ccccttantt 780  
ggtccccaa 789

<210> 3883

<211> 714

<212> DNA

<213> Homo sapiens

<400> 3883

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ttcagtttag ttccttagtt cagttggaat tttatttcaa tatgtgggag ctaatttttt 180  
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caaccacaat aacaggcgga gggtcggcgt ancatcttca ccagaagtag atttcatctc 540  
aacaaccac tttctttggt catctataag aagcaacttc tcatctgttc aagttttaac 600  
atgagattgc agcaattcag tcacatcttc aggctctaca tccgattgta gttctcttgc 660  
tatttcctcc anatctgcaa gcgacttcct ccactggaag gtccttttgg nngg 714

<210> 3884

<211> 790

<212> DNA

<213> Homo sapiens

<400> 3884

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 gttttacagt ttgtaagca gttatgtttc taccttgggg agagaaatgt aaagcaatca 180  
 tctttcagac atctatttaa acaaactgaa aagccatttc tttatgattt ttgtattcat 240  
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 ttccagtcag catatcaatt agatgtatca gaaataantg gttaaagac ttcagtcatt 660  
 taaatgagga aattcccttt tagaatccta actacctaac tgtgtaatca tgnataaca 720  
 gttatctact acaaaggggg ggagtttccg gtttaactcc ccaatttttt ccttangnag 780  
 tagcaaccta 790

<210> 3885

<211> 683

<212> DNA

<213> Homo sapiens

<400> 3885

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 aaagaatgta gtggacaagg gagaaggagg ctcccggggg ggaaacacac ggaaaagcct 180  
 cgaggacaac ggctccacca gggtcacccc gagtgtccag cccacactcc agcccatcag 240  
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 atggctcaat gcagacctc acaatgtcgt tgttctacac aacaaggga accgaggcag 540

gataggagtt gtcacgcgg cttacatgca ctacagcaac atttctgcca gtgcggacca 600  
ngctctggac cggtttgcaa tgaagcgggt ctaatgaggg ataagattgt gccccaaaat 660  
ttttgggggg gncccccna aaa 683

<210> 3886

<211> 683

<212> DNA

<213> Homo sapiens

<400> 3886

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gccagcgcca cttgcgagcg ctgcaagggc ggctttgcgc ccgctgagac gatcgtgaac 300  
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cactcaattt ctagaaaatt tctccacana ctgagagctc cagaattgat gactcagagt 480  
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aacagacctg gaatcatcca tttctccaag gatctctgct tcttcttgta aaataggcta 600  
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<210> 3887

<211> 677

<212> DNA

<213> Homo sapiens

<400> 3887

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 ctagattcat tccacctaca cttcaaggga tcgccttgaa gaagtcagta tttttgcaga 360  
 gatgcgtctc cacccaaagg tcctaggtac ctttgagcaa ttgtgaaagc cataaccctt 420  
 cacccegaaa tgacctgtcc tcatgcatat agaatcttac aatcacaggg gttatggatc 480  
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 aggcgctctt gttcctgagc agtgttatgt gaacagtgtc ctctgtctgt ggctctgtgt 600  
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 aagggttttn ccaangg 677

<210> 3888

<211> 666

<212> DNA

<213> Homo sapiens

<400> 3888

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 cggaactgcg ggacagccgg gatgaactgc tggccagcat gatggcgggc gtgaagtgcc 180  
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<210> 3889

<211> 656

<212> DNA

<213> Homo sapiens

<400> 3889

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 ctgaatgccc tggaggaaca caacttctg tttcagctga gaggggggtga gcagccccct 180  
 ccagggggcca aggagggcct ggaagtccc ctgattgctg tggttcagtg gtctacccca 240  
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 cgcccggtgt ttgtgatgac cgcttcttgt aagtccctg ttcggaccta cgagcgtttc 360  
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 agcagctgtg tgaggaggag cgccgggcca tgcangctgc cctggactcc gtcgtctgcc 600  
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<210> 3890

<211> 658

<212> DNA

<213> Homo sapiens

<400> 3890

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gaatacaciaa gcgatgatat gaacgtagca cctgaagaca ggggtgtgggt gagaggatgg 180  
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 aggggtttta cagtaatgtt tgaaataatg aaaacatatg gccacactta tgagaaacac 300  
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 caacagacag agaaagctga atggatgaca acaacttgca atcatgcact ttatgcaatc 420  
 tgtgatgtat tcactcagta tttagaagta ctcatgtatg tacttttggg tgacattttt 480  
 gctcagctct actgggtgtgt gcagcaagac aatgagcagt tagcgcgatc tgggtacaaac 540  
 tgttttagaga atgttgttat tctgaatggg gaaaaattta ccctagaaat ctgggataaa 600  
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<210> 3891

<211> 659

<212> DNA

<213> Homo sapiens

<400> 3891

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 catatgcccc aggctttcct gctgggggtcc atccatgagc ctgcaggtgc cctcatggag 180  
 ccccagccct gccctggaag cttggctgag agcttcctgg aggaggagct tcggctcaat 240  
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 gcttccccag tgggtggagt ggggggttct aggtggatgc ttggctgggt gtgctgtgga 480  
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 acatatactg gctcctgtgg tccggggccc tctcccagcg tctctgcccg taattaacca 600  
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<210> 3892

<211> 571

<212> DNA

<213> Homo sapiens

<400> 3892

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gcggcgcctc cacgcccgtg gggccctggg accaggcggt ccagcgaagg agtcgactcc 180  
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gagacgcacc gcttcattga ggctgcaaga gcacagggca cccacgtgct ggtccactgc 480  
aagatgggcg tcagccgctc ancgccaca gtgctggcct atgccatgaa gcantacgaa 540  
tgcagcctga acangccctg cgccacgtgc a 571

<210> 3893

<211> 680

<212> DNA

<213> Homo sapiens

<400> 3893

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ctctggttgt catggaacaa ataatttagg atacatggat ttgttgcgca tgctgactgg 180  
tccagtttac tctcagagca cagctcttac tcataagcag tcttattatt ccattgccaa 240  
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actagaagct ttctcatctc ctagtgaaga agtcaaatca gctgcatcct atgcattagg 480  
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tcaacccaaa aggcagtatc tttacttca ttccttgaag gaaattatta gctctgcatc 600  
agtgggtgggc cttaaaccat atgttgaaaa catctgggnc ttattactaa aaagggccca 660  
aaanccnttt gggggtttgg 680

<210> 3894

<211> 786

<212> DNA

<213> Homo sapiens

<400> 3894

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tttgacattc gctactatag taaccaagca ctcatatat atgcacctc caaatgtttc 180  
atgcttattt ataggaaagt tatattaatg agattaataa tgtgaaatac agttttcctg 240  
caaaattagc attagagaat tgattttaga taacagattt ttaaagtttt agagaaaagt 300  
acagtaatac agtaaaactga aagagtatat agatagcaat aaaataacat aagtggacat 360  
gtttatagta aatactctga agtaaacac cgtttttatt aactgcatct cattagggaa 420  
agtttatatg tcttgttatt ttttattaac attttattta ccattcagag tgaaaattac 480  
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tgcaaaattt gccttagcaa ttatctttga acatcccgaa ccagattttt aaatcccat 600  
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catatttttt cggtgttggg aacaacattg aaagtcagaa ttgggnnttg nttttaattc 720  
cttatacggg ttacataagc aatatcctgg cccctttaat taataaggat taatggtcgn 780  
ccttca 786

<210> 3895

<211> 709

<212> DNA

<213> Homo sapiens

<400> 3895

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 aataaaaata agttgatatt tatcttccct cttagtcaaa atgcttcttg gaggttgggg 180  
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 aacatctcat tggattagga aaaattgaaa accatatgtt ccatgtaaag aaatcattta 300  
 ttgtttcgat atttgtgcc acaaacact gaatgcttta tttctgcaaa agcatattga 360  
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 gggagggaat ctgtttcatg cctcttgctt agtttctgga gtttatggca atcgttggaa 660  
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<210> 3896

<211> 539

<212> DNA

<213> Homo sapiens

<400> 3896

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aaaaggtgga tgaacgagcc aagctgagcg tcgccgcca gaggttgctt ttcagggaga 420  
 tggaaaaatc ttttgatgaa caaatgttc caaagcgacg ctcaagaaac acagctgtgg 480  
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<210> 3897

<211> 717

<212> DNA

<213> Homo sapiens

<400> 3897

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 attgatactt ccaatgtgcc ttattttgag cctgatacta tggaattttg cctgctatta 180  
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 caacaaataa acaatggaca cttagaaca acatctgaac actgttttag ccagtttgcc 420  
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 ctctttttct gtgtaaatgg taggntactt cccttcaaga nccctatgtg aatctagaat 660  
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<210> 3898

<211> 681

<212> DNA

<213> Homo sapiens

<400> 3898

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aagacagtct tcccttggtg tctaactact gcggggacgc ctgcctaatt attcaccac 180  
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gcaactatct tccagtcctc taacaagcta nacaggaaat ttgcaaactg ctaatctct 660  
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<210> 3899

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3899

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catatgggga tatatcgag ctgaaaaaat ttcgagaaga tcacaactgc aaaagtttta 180  
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tgaataacat ccatagtgtt tagagagaaa aaaataaacc aataacctan ctactgacaa 660  
gtaaatttat acaggactga aaaccgcctg aaacctgctg caactaatgg tantaaccnc 720  
tgtata 726

<210> 3900

<211> 675

<212> DNA

<213> Homo sapiens

<400> 3900

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tgtccntaaa angta 675

<210> 3901

<211> 650

<212> DNA

<213> Homo sapiens

<400> 3901

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<210> 3902

<211> 643

<212> DNA

<213> Homo sapiens

<400> 3902

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 aggaggaccg cagcaagctg agatctgtat ctgtggacct gaatgttgat ccctcgcttc 180  
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<210> 3903

<211> 779

<212> DNA

<213> Homo sapiens

<400> 3903

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 agataagagg atttgtaaaa atttttaagg ctgagagaat attcgaattc aagcaagatg 180  
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 tcagaacact cactaagtgg ggaattctag tcatacaagg gctcttaggg ggggggtgttt 660  
 gtgctatattt catagattag cctaattcta ccaaacagta tttctagtaa ttcatacatc 720  
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<210> 3904

<211> 694

<212> DNA

<213> Homo sapiens

<400> 3904

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<210> 3905

<211> 472

<212> DNA

<213> Homo sapiens

<400> 3905

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cccacacatg agtctggatc ctgcctatga tcctcccgtg gccccacac aatctgggga 240  
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<210> 3906

<211> 575

<212> DNA



<213> Homo sapiens

<400> 3906

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<210> 3907

<211> 788

<212> DNA

<213> Homo sapiens

<400> 3907

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aatctctcat gtttcagggt ataactatgg aatcccccat tcttgatca ggtaataaat 540

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 acagcatttg catcaataat aaggatacct ggatgtggga aaattaatga gaaattggga 720  
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<210> 3908

<211> 475

<212> DNA

<213> Homo sapiens

<400> 3908

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 aacacagtga gctgtgactt catgcttact acgatggctg taattaaaaa acaggaaagg 180  
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 aatacaagaa aaattggctg ggcgttgttg cgggtgcctg tgggtcccagc tacttgggag 360  
 gctcaggcag gagaatggcg tgaacccggg aggtggagct tgcantgagc tgagattgtg 420  
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<210> 3909

<211> 722

<212> DNA

<213> Homo sapiens

<400> 3909

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gtagttcgt tttcatgctg ctgataaaga catacctgag actggacaat ttacaaaaga 180  
aaggtttatt ggacctatag ttccacatgt ctggggaggc ctcacaatca tggcagcagg 240  
caaggagggg caagtcacat cttatgtgga tggcaacagg caaagagaga gcttgtgcag 300  
ggaaactcct gtttttaaaa ccaccagatc tcatgacacc cattcactgt caggagaaca 360  
gcatgggaaa gacccacccc catgattcaa ttgtctccca caaggcccct cccataccac 420  
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tttaaaaata atctacaagg tatactgttt ttctgttctt gttatttccc taacttttaa 660  
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<210> 3910

<211> 602

<212> DNA

<213> Homo sapiens

<400> 3910

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ggtgccacag ctcgccacgt gtgtgaaatg ctggtgcanc gagctcacgc cttgagcgac 540  
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<210> 3911

<211> 742

<212> DNA

<213> Homo sapiens

<400> 3911

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gcgcaccgac atgcacatca gtggagtgtt tgccaccaag gatgctgtcg cagtctggaa   300
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cttgtgtgag acgcctgtgt tagcaatgca tgaagaaaac gtttacacgg tggagtcaaa   420
ccgagttcaa gttcgaacct ggcaggggac tgtcaaaca ctcctccttt tctcgagac   480
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cggaagcac catcaagcat cctccccaan caaagggtga caaacaancc cctgaattcc   720
aaaaatctgn ctttctaacg aa                                           742
    
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<210> 3912

<211> 742

<212> DNA

<213> Homo sapiens

<400> 3912

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ccgcctgacc ctggagcagc ttagcgacct gttgacaatc gctgtaaacg gaccgccaat 180  
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 acagaccatg gaccacggga cggagtttta ccccgacatt tagggagctg gcgctgcaga 360  
 gttcactaag ctgttgaata tttttttaat ctatactcat aagctttgat atattatata 420  
 aatatatatt atattanatt atattatatt atatatatat atatatataa actcacactg 480  
 aaaattttta aaaaccaagg tgacgcgtcc accagaagcc actgggagat ttcanaaagg 540  
 aaaaatgttg gaaactgact cttgtctaca aaatttggca gctgcaacat acatggcanc 600  
 tcattttcac tcacagaagc acgtgctggg gcctcctgtg ttcccaactt actgtccacc 660  
 aacagcataa gctaaaatga caggtctctg tcatcacctt taggtagcnc attttggtna 720  
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<210> 3913

<211> 667

<212> DNA

<213> Homo sapiens

<400> 3913

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 aaggaagaaa ggcaaaaaca gttgcagcaa cagaatgaaa aagagatgat ggaacagatt 180  
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 ccatcctctc tcctcagctt aaatacctca aataaggag aacttaatgt actgggggtcc 360  
 ctatcattaa aagatgcagc tcttgcccaa aaagacagtt cccctgctca cttaccccca 420  
 aaggaccgac ctgtcaccgt gttctttgaa agaaaaggaa gtccatgcca atctagtact 480  
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 tcaaataatc gcatttcaaa aagagaacac ttangccaa ctcagtctta cagccacaat 600  
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atgagta

667

<210> 3914

<211> 783

<212> DNA

<213> Homo sapiens

<400> 3914

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 caatTTTTTT ttactcttat cagtaatgaa catcggttgc acataatctg tgtacaaaag 600  
 tacgactgtt tctcaagggt aaattcctan aaggaggata actgggatna aagggtatTT 660  
 acatgtaaaa ttgggaaaca tgttgcaaaa tgccccaaga gggtaaaccg ggTTaatcct 720  
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<210> 3915

<211> 729

<212> DNA

<213> Homo sapiens

<400> 3915

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 gacttcatga tgaattccta natgggcaaa gatggattga agacaacctt gatttcaagt 660  
 gtgaattcan aggtgtctgt gtttgaaagt caacattcna gtttaattgg agggctactt 720  
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<210> 3916

<211> 676

<212> DNA

<213> Homo sapiens

<400> 3916

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 tgtagccaat gaaataacat gttctgggcc ccaccactgg actgggaggt gcagcgcac 180  
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 ccccagaccc ttccctcccg tggggggagg ggtgtggcac gcanaggggc agagggcggg 480  
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cancctggag ccccccatcc tttggctcct gcctgtggcc actcagctct caagtgggca 600  
catgcacatc cctgtctcct tccctgngca nctgccctgc ccaatgggct ttctgttccc 660  
agctactgaa accggt 676

<210> 3917

<211> 762

<212> DNA

<213> Homo sapiens

<400> 3917

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tgttaatgga agtgtggcaa ttggagcagg tgacaaagaa caagcccttt cgagtcccc 180  
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aatgatgaag gctangatg gggatgcggt caagggcact agccttgaaa aggggggaca 720  
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<210> 3918

<211> 698

<212> DNA

<213> Homo sapiens



<400> 3918

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 ctttgacagt tcataattgc tttttttcca taaaggtctt tattgnttta atttcataaa 660  
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<210> 3919

<211> 775

<212> DNA

<213> Homo sapiens

<400> 3919

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cccagtgcc a tcaactggcag agattgtgga gcggaatccc cgggtagaac cagggggccg 600  
gtaccgccct gctgctctac cacctgcacc ctttcttgca gcgccagcag cttgcttatg 660  
gcatctatgt catccancaa gctggaaatg gaacatttaa caaggcaaaa ctgttgaacg 720  
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<210> 3920

<211> 910

<212> DNA

<213> Homo sapiens

<400> 3920

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tcttttaaac atcctcatgt tgcaaacc caacttcaaa tggcctctcc agaggagaag 180  
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gcagtagcgc ttgaccttcg agtgtttgcc aataatgcag atcaacagtt ggtaaagaaa 420  
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cgggtctgtg ccagcgacac ccgtgctggt atagaggact ctaagaagtg gggcatgctg 540  
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nnggatgatt ctgatcaatt gcttccagtt aaaaatgcta ttgggggtcaa atgccactgt 840  
gggagcccc gaaaaagttt cacccgatg caattttgcg gaagntaacc anaacttttt 900  
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<210> 3921

<211> 666

<212> DNA

<213> Homo sapiens

<400> 3921

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acgtcgagaa tttgtgatgc aggtgaaggt aggcaatgaa gttgctacag gaacaggacc  180
taataaaaag atagccaaaa aaaatgctgc agaagcaatg ctgttacaac ttggttataa  240
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tccaaagcct gggtttcctg aaccaacaaa taatactcca aaaggaattc ttcatttgtc  360
tcctgatgtt tatcaagaga tggaagccag ccgccacaaa gtaatctctg gcactactct  420
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nancaa                                           666
    
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<210> 3922

<211> 786

<212> DNA

<213> Homo sapiens

<400> 3922

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aggctctgatt tcctctgcga tgttcttcag ctaagaccta aattctgaaa ccgttaaaac  180
ctgaagtgcc tttaaataata ttatttcac agagccccag gttcattgtg tcacttatca  240
aggctctgatt tagggctctc aaggactaat cttgttagtg tttaaagca actaggtttt  300
    
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gtttttggca ttttagttcc atcttctaga ttctgttgtc ttgcagatag agatcaggga 360  
 gccagctac acattcattc ttctagtccc ttgtactcat tgtatttcct tctgccttag 420  
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 ctatattcct tcctaaatcg taaagctgca cnagagcang atcatttggtg tctgccttac 660  
 taaccttttc atcctgagtg cctggcaaaa gtgcttggtg nctggattga tacttaataa 720  
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<210> 3923

<211> 656

<212> DNA

<213> Homo sapiens

<400> 3923

gcgacacccat ggacttatgc ttatctcttc aagtatatca tcatcggaga cacagggtgtg 60  
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 acaataggtg tggagtttgg agctcgtatg gtcaacattg atggaaaaca aatcaaactg 180  
 caaatctggg atacggggag cagctggagc actgctgggtg tacgacatta caaggcgtga 240  
 aaccttcaac cacctgacct catggttaga ggatgcccggt cagcactcta gttccaacat 300  
 ggttatcatg ctcatggga ataagagtga cctagagtcc cgcagggatg tgaagagaga 360  
 agaaggagag gcctttgcta gggagcatgg acttatattc atggaaactt cagccaaaac 420  
 agcctgcaat gttgaagagg ccttcattaa cacagccaaa gaaatatata ggaagatcca 480  
 gcagggttta tttgatgtcc acttcccact aagaattagg gtcaaagaca ttctatttga 540  
 acacttgcaa ttacctagat ctaattggnc tttggntgat agattctctg cctcgnatt 600  
 tcattgagtt ttttctctcc ttgcctttgg gtgtctgctt gccacttcct aaagaa 656

<210> 3924

<211> 821

<212> DNA

<213> Homo sapiens

<400> 3924

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gcttcctcgt tgcccccgcc gcgggcgcga gatggattcc gggtgctggt tgttcggcgg 60
cgagttcgag gactcgggtgt tcgaggagag gccggagcgg cggtcaggac cggccgcgtc 120
ctactgcgcc aagctctgcg agccgcagtg gttttatgaa gaaacagaaa gcagtgatga 180
tgttgaagtg ctgactctca agaaattcaa aggagacctg gcctacagac gacaagagta 240
tcagaaagca ctgcaggagt attccagtat ctctgaaaaa ttgtcatcaa ccaattttgc 300
catgaaaagg gatgtccagg aaggtcaggc tcggtgtctg gctcacctgg gtaggcataat 360
ggaggcgctg gagattgctg caaacttga aaataaagca accaacacag accatttaac 420
cacggtactc tacctccagc ttgctatttg ttcaagtttg cagaacttgg agaaaacaat 480
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ggcagaggct tacctgaatc tggggccagc tctttcagca gcacttgcgt catctcagaa 600
acagcacagt ttcacctcaa gtgacaaaac tatcaaatcc ttctttccac actcaggaaa 660
agactgtctt ttgtgttttc ctgaaacctt gcctganagc tctttaattt ctgtggaagc 720
gaatagcaat aatagccana aaaatgagaa agctctgaca aatatccaaa aactgttttg 780
canaaaaaga gaagaaacaa gtggttgata anagaactca a 821

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<210> 3925

<211> 635

<212> DNA

<213> Homo sapiens

<400> 3925

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tattatagac cataatatgc ctgtcataag cagactgttt ttgttgactt tcttgacctt 60
ctggggtagg tagtgccacc tccttggaag aaagatcctt ttcgtgatgc cagggcaatg 120
attaacacat ggaaaattgg agcaaatgaa actgcaatta atactgctca aacagattgc 180

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agagtatgat gaagaacttg gatgtcattt tattgcagcc tctcctgggg acaccattat 240  
 tttatcacct ttgacttttg gatgtatagc tccatttgac atctcttgte ttttcctgct 300  
 ttctttcttt attcttccca gtgggagtta gatgaagaat gtctggcttg cagaagccag 360  
 acttggccat tctgggagat gtgcagactt tcagattggc ttgacagtc ttacagagct 420  
 gttcccagga tatgaagcac agctgcaaag caggcagttc ggctttgcct tctcttactt 480  
 tcaagatgtg tgatgggang cggggaacat acaaccccca gctgcttaaa ctcttcttta 540  
 tccagaattc cccttccttt anctttggga ggcttcanat atcactcagt tgactgatta 600  
 aatatcaagg gataggaatc tatccccaag ggngg 635

<210> 3926

<211> 756

<212> DNA

<213> Homo sapiens

<400> 3926

aaaactaatg actgagcaca aacctgttga agatgcagtt cttcttggtg gcctaaatag 60  
 gattatcttg gacctaagat agtgaccttg tttttttttc ttaatttttc cattgaaata 120  
 catggcctta aggaaatatg caaaaaaaaa aaaaaatgaa cctggaaaaa aaaggtcctg 180  
 gaccaggtgg atgcctcata tattaagaaa tccccgaggc cgggtacagt ggcttacgcc 240  
 tgtaatccca gcactttggg aggccaaggc gggcggatca cgaggtaag agatcgagac 300  
 catcctggct aacacggtga aacctgtct ctactaaaaa tataaaaaat ttggtgggcg 360  
 cctgtagtcc cagctacttg ggaggctgag gtaggagaat ggcgtaacg caggaggtgg 420  
 agcttgcggt gagtggagat tgcgccaccg cactccagcc tgagcgacac agcgagactc 480  
 cgtctcaaaa aaaaaaaaaag aagaagaaaa agtatccccg gtactattca aatggaactt 540  
 tatcactaat aancacaagg gaagaccatg ccccatgtta gcaatgcaaa ttattgctac 600  
 agctgcctaa gataatttgg nccttagttg ataatatnca agagaatgtg gacttctaag 660  
 tccctttgcc ttgcatcctc tgtttcaaat ganttaaagg ggttgtgtag ggaaagcaag 720  
 ttantaaaac ttaggagaaa nccttcccaa gattta 756

<210> 3927

<211> 669

<212> DNA

<213> Homo sapiens

<400> 3927

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tggtgagga agagagagac cctctcatat tgttttatac tcagaaaaga aaagagaagc   60
aaaactaaag gcaggtagcc tggcacctag gaacagaccc aaaaccaagg aaccagaccc  120
gaaaccaggc ctgggcctgc ctgacctag cctagtagtt aaaattctac ccctgacctt  180
gcaactgatg ttatctctag attatagaaa gacattgtaa aacttcccgg tctgttctat  240
ttcactctga ccaccgttgc atgcagcccc tgtcacgtac cccctgcttg ctcaatcgat  300
catgaccctc tcacgcggac ccccttaga gttgtgagcc cttaaaaggg acaggaattg  360
ctcactcggg gagctcgat ttaagacac tagcctgctg atgctcccag ctgattaaag  420
ccactccctt cactatcttg gtgtctgagg ggttttgtct gcggcttgtc ctgctacatt  480
tcttggttcc ctgaccagga agcgaggtga ttaacggatg gttgaggcag ctccttangg  540
gactttagcc tgccctgttg aacatccctg cgggggactc caaccagcca aagcaacgcg  600
gatcctgana gtgtccttgg gtangcactt gccctgatgg gacgccttgc caaagcantg  660
tgtggaagg                                     669
    
```

<210> 3928

<211> 755

<212> DNA

<213> Homo sapiens

<400> 3928

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aaaaaaaaa aaaaaaaggt ttgtctccgc tgtttcatct ctatggctgt cagaggtggg.   60
cggctttgac cgagaggctg ctggagctcg tgtttggacg cgatgtttcg tctgaactca  120
ctttctgctt tggcagaact ggctgtgggt tctcgatggg accatggagg atcacagccc  180
atccagatcc ggcgaagact aatgatggtg gctttcctgg gagcatctgc agtaactgca  240
    
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agtactggtc ttttgtggaa gagggcccat gcagaatctc caccatgtgt agacaaccta 300  
 aaaagtgaca tcggtgataa agggagaat aaagatgaag gggatgtttg taaccatgag 360  
 aaaaagactg cagatcttgc ccctcaccca gaagagaaaa agaagaaacg ttctggattc 420  
 agagacagaa aagtgatgga atatgagaat aggattcgag cctactccac gccagacaaa 480  
 atcttccgat attttggcac cttgaaagtc atcagtgagc ctggtgaagc agaagtgttt 540  
 atgacaccag aagattttgt gcgatccata acaccaatg aaaaacaacc agaacacttg 600  
 ggtctggatc aatatataat aaaacgcttt gatggaaaga aaatttcca ggaacgagga 660  
 aaatttgctg atgaaggcag tatattttac acccttggag aatgtgggct catatccttt 720  
 tcagactaca ttttctcan aantggtcnt tccaa 755

<210> 3929

<211> 714

<212> DNA

<213> Homo sapiens

<400> 3929

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 ttatggatga gtatgagaag actgaggaag aattacaaaa gcagtatgac acttatcttg 120  
 agaaatttca aaatctgact tatctggaac aacagcttga agaccatcat aggatggagc 180  
 aagaaagggt tgaggaagct aaaaacactc tctgcctgat acagaacaag ctcaaggagg 240  
 aagagaagcg cctgctcaag agtggaaagta acgatgactc ggacatagac atccaggagg 300  
 acgatgaatc cgacagtgag ttggaagaaa ggcggctgcc caagccacag acagccatgg 360  
 agatgctcat gcaaggaaga cctggcaaac gcattgtggg cacgatgcaa ggtggagact 420  
 ccgatgacaa tgaggactcg gaggagagtg aaattgacat ggaagatgat gatgacgagg 480  
 atgacgattt ggaagacgag agcatttctc tctcaccaac caagcccaat cgaagggtcc 540  
 ggaaatctga acccctggat gagagtgaca atgacttctg acccttttgc caagggaccc 600  
 tggcagatta aaaccctcag actttaggtt aaatgggaac ttanaagggt aggaaggtaa 660  
 nccctgtttt gtttactaag ctgngtggac tcatgatcac tgaagcaata ctta 714



<210> 3930

<211> 632

<212> DNA

<213> Homo sapiens

<400> 3930

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gtgcccagct gagagcagca ccaacaccac ccaggatgag cagcgcaggt ggccaggctg   60
tgaccagcag gacgagatgc tcaacctggg cttcaccatt ggttccttcg tgctcagcgc  120
caccaccctg ccactgggga tcctcatgga ccgctttggc ccccgaccgg tgcggctggt  180
tggcagtgcc tgcttcaactg cgtcctgcac cctcatggcc ctggcctccc gggacgtgga  240
agctctgtct ccgttgatat tcctggcgct gtcctgaat ggctttggtg gcatctgcct  300
aacgttcaact tcactcacgc tgcccaacat gtttgggaac ctgcgctcca cgttaatggc  360
cctcatgatt ggctcttacg cctcttctgc cattacgttc ccaggaatca agctgatcta  420
cgatgccggt gtggccttcg tggcatcat gttcacctgg tctggcctgg cctgccttat  480
ctttctgaac tgcaccctca actggcccat cgaagccttt cctgcccctg aggaagtcaa  540
ttacacgaag aagatcaagc tgagtgggct ggnccctggac cacaangtga caggtgacct  600
cttctacacc catgtgacca ncatgggcca aa                                632

```

<210> 3931

<211> 776

<212> DNA

<213> Homo sapiens

<400> 3931

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atcaagcagg ggcagggctg gcgctgcggc gggagatgct gtcgggccgc ggcggcgctt   60
ggcagccagg agctctgcat tgaaggcact ggggtaaagt gaatgccgaa gacagaagat  120
ttggatgata caccactgac tttctttgtt tggaatacac gttatgaacc ctttctggag  180
catgtctaca agctctgtac gcaaacgata tgaaggatgaa gagaagacat taacagggga  240
cgtgaaaacc agtcctccac gaactgcacc aaagaaacag ctgccttcta ttcccaaaaa  300

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tgctttgccc ataactaagc ctacatctcc tgccccagca gcacagtcaa caaatggcac 360  
 gcatgcgtcc tatggaccct tctacctgga atactctctt cttgcagaat ttaccttggt 420  
 tgtgaagcag aagctaccag gcgtctatgt gcagccatct tatcgctctg cattaatgtg 480  
 gtttgagta atattcatac ggcatggact ttaccaagat ggcgatatta agtttacagt 540  
 ttacatccct gataactatc cagatgggtga ctgtccacgc ttggtgttcg atattcctgt 600  
 ctttcaaccg ctagttgatc ccacctcaag tgagctggat gtgaagagag catttgcaaa 660  
 atggaggcgg naccataatc atatttgga agtattaatg tatgcaagga gagttttcta 720  
 caagattgat acaagcaaag cccctgaan ccaaaaggct tgcaagtact ggtntn 776

<210> 3932

<211> 733

<212> DNA

<213> Homo sapiens

<400> 3932

aagggtctgc agcggccaga aaccggctc cgagcggcgg cggcccggct tccgtgccc 60  
 gtgagctaag gacgggtccg tccctctcgc cagctccgaa tcctgatcca ggcgggggcc 120  
 aggggcccct cgcctcccct ctgaggaccg aagatgagct tcctcctcag cagccgtctt 180  
 tctaaaacat tcaaaccaaa gaagaatata cctgaaggat ctcatacagta tgaactctta 240  
 aaacatgcag aagcaactct aggaagtggg aatctgagac aagctgttat gttgcctgag 300  
 ggagaggatc tcaatgaatg gattgctgtg aacactgtgg atttctttaa ccagatcaac 360  
 atgttatatg gaactattac agaattctgc actgaagcaa gctgtccagt catgtctgca 420  
 ggtccgagat atgaatatca ctgggcagat ggtactaata ttaaaaagcc aatcaaagt 480  
 tctgcaccaa aatacatgta ctatttgatg acttgggttc aagatcagct tgatgatgaa 540  
 actctttttc cttctaagat tgggtgtcca ttcccaaaa actttatgtc tgtggcaaag 600  
 actattctaa agcgtctgtt cagggtttat gccatattt atcaccaagc actttgattc 660  
 tgtgatgcag ctgcaaagan ganggccaac tcaacacctc cnttaagcac ttttaatttc 720  
 cttggtcaag gag 733

<210> 3933

<211> 762

<212> DNA

<213> Homo sapiens

<400> 3933

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tatgaaatgt ttcattattga aaacacaaga tgacctttct aatgagctgt atgagaggtg 60
aatctcctca ctgtcactgc catagccaag catcctcatg agagttagca catcggcaca 120
gcatgcatcc agctctggag gccacgggtgc aggcatagct gcctgctgct ctggcagagg 180
ccagtaaata cagttcctag aagcagcctt tgctgtcttt ttacactgta tgcgggtttg 240
aaatgaatgt agaaacttac tgtgggcatt tacctttctg tgccagtttg gcttttattg 300
cctgaacctt atgctgacct ggagaggaga tgggggacag tgctgttggt gggccagcag 360
tgaatctgta tgcggagagt tgtgttggtg tgatgtggcc gttggtggtc aggtaagagg 420
ctcggcacct tcttgaaga aatcatgtct gaggggtgtac gtttgatatg atcatgccag 480
attggagaag atccaagcca ggaagatggg cttgaagcaa actgcattat caggagtacc 540
ttggtgagag gatcagtgtg aatcctaata ggtacaaaga cttttgtgtt ttggctttgt 600
cacagattta ttgaaaaact tttttgcttc tgcttccatt tttagcattt tagtttctgg 660
ttttcatttt tggngaatac ttgcctttta aactcgtggn ttttctctca ttttcttccc 720
tctctccctc catctctgac canccccaac ctaaccccc aa 762
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<210> 3934

<211> 749

<212> DNA

<213> Homo sapiens

<400> 3934

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aaaccgagtt ctggagaacg ccatcaagct cgctgcttaa aattaaacca caggttccat 60
tatgggtcga cttgatggga aagtcattat cctgacggcc gctgctcagg ggattggcca 120
agcagctgcc ttagcttttg caagagaagg tgccaaagtc atagccacag acattaatga 180
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gtccaaactt caggaactgg aaaagtaccc gggtattcaa actcgtgtcc ttgatgtcac 240  
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 tgttgctggg tttgtccatc atggaactgt cctggattgt gaggagaaag actgggactt 360  
 ctcgatgaat ctcaatgtgc gcagcatgta cctgatgatc aaggcattcc ttcctaaaat 420  
 gcttgctcag aaatctggca atattatcaa catgtcttct gtggcttcca gcgtcaaagg 480  
 tgggtctgtc tccttccgag gactgcatg ctcatcacg cacatcatta agagctctgc 540  
 gtttggaac aggcatagca gagattataa tttcaagtat tgaaatgatt tcaaaactgc 600  
 ttttttcaaa atttggtatta agttccttaa ccacagatct tttgctctcg atgtgagcca 660  
 gtggtaaaat taaattaaaa tgtgggggta tttttgccct cccttttant ctttctaagt 720  
 ggncatggna aatgaacatc aaactggga 749

<210> 3935

<211> 784

<212> DNA

<213> Homo sapiens

<400> 3935

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 ccggggcccc aggcattccg ggctgcagat tgacggggat cccggatgca ccgcgcgccc 180  
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 ggatcccgat gcctacgagc caagatgctc agctttatag gtgtgaccta cacatgtgac 300  
 ttcacctcag ttttgtgatc cgtaaaatgg acaaattcga agctacttca cagtgtgtgt 360  
 gagaggatta aatgaaacaa tgcttgtaaa gctctttgca ggaggagacc tcggaagcag 420  
 ggcttgccg gcagagcaca cctgctgtca ccagggacca caggcagcat gaagaccccc 480  
 gtggagctgg ccgtcagtgg gatgcagacc ctcgcccttc agcaccgctg ccgaggtggc 540  
 taccgggtca aggccaggac gtcatatgtg gatgaagact ctgtttggca gcccaacang 600  
 caccggcct accccaccgg acttcgattc gccctgggtg gagaaggcta acagaaccag 660  
 aggcgtgggc aagganggca tccaagggcc ttggggggca aaagggaag cttgtgagaa 720

ccaacccccct caaagggggc aannaacccc caaccctcaa aaccaaaggg aaagaangaa 780  
 acaa 784

<210> 3936

<211> 99

<212> DNA

<213> Homo sapiens

<400> 3936

acctgatgtg ttnaaagcac ttcatnaggc cccggttttc ctttggttc tgcttttcag 60  
 tgantggnat gactgcctat gtgggtggca atgccaccc 99

<210> 3937

<211> 688

<212> DNA

<213> Homo sapiens

<400> 3937

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 ccttaccacc agtgggtcct tccccctgcc tcacaggcat gcacatgctc tctctgtagg 120  
 taaaaagtac agcatctggc ttagcttcag atacttccag ttttctaaag accagtgcct 180  
 tgaatgcttt ttgttactta ggtaagctcc atcaactgta aaataagtat tgggtggattt 240  
 atggatttca aaaggcagaa caactaacat actgaattcc tgattccagt ctatgttcta 300  
 ctggagtgtg cagaatgcc aatgctaacg caaacagtgc tttttcttc taaaaggagg 360  
 aaagaggggtg ggaatgagag gatgaattcc tatcagttta ggaggatgtt gccattggga 420  
 gttcttgcgt aatttgagat tgtaaacct agaaggtttc ttgtctttgt tatgtangag 480  
 gaaacaggaa ttcttggttt aacttaggct gggcctggga agagtttgct gtttacaatg 540  
 agatctaacc ccttattgga gatgatttta aaaatctctg gccacctta tgggcatctt 600  
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ctcaattgnt gtcccaagta ntccaata

688

<210> 3938

<211> 796

<212> DNA

<213> Homo sapiens

<400> 3938

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attagactaa agaagagagg taggataatc atgggcattg gcagtggaat tgaaagagta 180  
atttcagaag cagaatggtc agatgttgga ggtgattggt tatagagttt aagaattgta 240  
ctgattttct attgtgtaac aaactacccc aaaacttaat ggcttaaagc aactattatt 300  
tctcctgatt ctgtggttga ctggatggtc gtctgtctgt cttgcttaga cttaggcatc 360  
tgcatttagc tgagggttca gccagggtg gacatccttt aatggcctca ttcccatgtc 420  
tggggcctca ggtcagatag ctgggactac cgggtctcac tccagaagag gcttcttcag 480  
agcatggtag tcttgggggt ctaagagaat gagagtagaa gctgcaaaac ctcttgaaac 540  
tggggcttgg gagtacaca tgactttctc cacattctgt tcgtcaaaag cgaatcataa 600  
ggacagcaca gactcaaggg ataagaaagg agattccatc tcttgatgaa gaagagctgc 660  
aaagggcata tttaatcagt cacangagtc taatgctaca aagtagtttt ttaaaaagat 720  
gactagattg gcaagttcaa gggtaatcct tttaattggt ttaattanat atcacttagc 780  
tggnantcag taaagc 796

<210> 3939

<211> 486

<212> DNA

<213> Homo sapiens

<400> 3939

gaataaatta gaggggatct cgggtcgaac tticcttgac ctcgacccca aagaggcttg 60  
 ctggggccga gaagaaaacc cgtgcgggat gtggaggggc ccggggcgcc ggggtccccc 120  
 gcccgcgaga cccgctccac caggcgcctt ggagagcagc gccagcggtc gtcctccagc 180  
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 ggcctcggcc cggcggcagc acgggagaga tgtgaggagc gcgcggaagg ggagcgcggc 300  
 cggggagatc ccagcgcggt caggcccggg agccgaggct cgggggcccg ggaactgggc 360  
 ttcccacagc agaagaccca acaaagacac caggggagcc cggcgggctg ggcgcgagaa 420  
 gacgtggttag caggttcgct cctccgagca gacgggaggc gccatcatgg gggggggggg 480  
 gtcnnn 486

<210> 3940

<211> 607

<212> DNA

<213> Homo sapiens

<400> 3940

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<210> 3941

<211> 646

<212> DNA

<213> Homo sapiens

<400> 3941

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<210> 3942

<211> 654

<212> DNA

<213> Homo sapiens

<400> 3942

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aataagtaca tctgtcataa attaggactg tgtggaaata aatgtaaata ctggtcttgt 180
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 aagaaatttg tttttgcaat tagccgagca tgtagcccag tctctcactg tcacttcatg 540  
 ttatgtatgt ggaggaactg taatancaga tcaatggnca tgggaagccc gagaattagt 600  
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<210> 3943

<211> 682

<212> DNA

<213> Homo sapiens

<400> 3943

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 cgacgcagag ccttcaagcg ccgcagtcgc cgacggcttc cccgcgggccc cactgtctc 180  
 cccaagacgc ctggcgaggc cgccgggggct ggaggaggcg ctgagcgcg cggggctgca 240  
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<210> 3944

<211> 556

<212> DNA

<213> Homo sapiens

<400> 3944

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 cttcaaggaa aaatcccaca cgctgggtcaa caacagctgg cttcctcaag cagaacactg 180  
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 aggataacag tcgtgttgaa cctgttggac atgctgacac gggtttggag catataccca 420  
 acttttctct ggatgatatg gtaaagctcg tagaagtccc caacgatgga gggcctctgg 480  
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<210> 3945

<211> 689

<212> DNA

<213> Homo sapiens

<400> 3945

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 gtggcccttc taaaagtttc cctaattgatg gaagctgtca gttgtcctat ctgtgcagaa 180  
 tgtgagtaat agtggcagaa ataagtgtga caacaatgct ttgcctgttg ttctttttac 240  
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cctctatgga taaaatcata agtttangat ttttanctcc tgtgagtgtt gggggcaaac 660  
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<210> 3946

<211> 606

<212> DNA

<213> Homo sapiens

<400> 3946

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caagcaccta ttatggtaac ttacgaccta tttctccgtg gcgttggctg ntttctgctg 360  
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ctttgctgat gttcttcttg tcttcttcga aactcactaa atggaaggga gaagtgaaga 540  
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<210> 3947

<211> 665

<212> DNA

<213> Homo sapiens

<400> 3947

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gattgcttga gtccgggagt tcggaaccgg cctggacaac atggtgagac cccgtctcta 180  
caaaaaaaaa aaaaaaattt ttaattagcc aggtgtggtg gcatgcacct gtagtcccag 240  
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gaatctcttg aaccagggg gtggaggttg cactgagccg agatcatgcc attggacttc 600  
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<210> 3948

<211> 861

<212> DNA

<213> Homo sapiens

<400> 3948

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gacactctcc ctaacactga taacctgagc cccagcact ggacggaaga atgctggcgt 180  
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aaagtgcata gtttggggca atggtatcta catctccac tgtgggaaaa ccagcaaagc 480  
atcaaaactc tcaattctcc tgttaccgaa tgcagatctg aattataaga tgtttatgtt 540  
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cagcatgtga tttttgaagt ttacatgtaa agtcacagta taggtgaaat aacgtttgtc 720

atattttgag acgtatcctg gaaaccaatg tttttacgtt nagtggtttt aagtcaaaaag 780  
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<210> 3949

<211> 878

<212> DNA

<213> Homo sapiens

<400> 3949

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 taaaactcct tagaaaagca caaagcaaaa ctaaagaaga gtatttacta gtgttggata 180  
 tatttgtaaa agtgagatta caaatcatgt atctggctat tttttctta aacatgttcc 240  
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 gtaaaaactt tgagaaagca atgttgccct cttccacag gagtattttg gtagctgtaa 420  
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 aatatgacgt tagctctctc tagacctatt aatttacgac atttcaaac agaggtaaac 720  
 cagcagacct attanttttc aatgataaac tataaacagt ttttgaantc aactaattcc 780  
 tttcctttaa attgggcaga attcatcagg aagtcagaca accaattata aangctctc 840  
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<210> 3950

<211> 452

<212> DNA

<213> Homo sapiens

<400> 3950

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 gaagcggaga gcaccggggg gaggagatgg gaggacgaag aggtcccaac aggacatctt 180  
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 ccagtgcac ggtgaccagt gticgttccc gcaccacgag cagttctggt acaggcctct 300  
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<210> 3951

<211> 615

<212> DNA

<213> Homo sapiens

<400> 3951

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 caggagcggg cggaagacaa cggaggggcc gagcgtccga gccactccgc ggggaccgaa 180  
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<210> 3952

<211> 300

<212> DNA

<213> Homo sapiens

<400> 3952

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cgagtgccca cccaggagcc caccacaggg gagcccacca ggcaagcagc ctcccaagag 240  
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<210> 3953

<211> 539

<212> DNA

<213> Homo sapiens

<400> 3953

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ctcttttctg aaagacaaaa gcataatgcc accttaaagt tctcagttta ttttttgcga 180  
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<210> 3954

<211> 597

<212> DNA

<213> Homo sapiens

<400> 3954

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<210> 3955

<211> 726

<212> DNA

<213> Homo sapiens

<400> 3955

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<210> 3956

<211> 703

<212> DNA

<213> Homo sapiens

<400> 3956

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<210> 3957

<211> 849

<212> DNA

<213> Homo sapiens

<400> 3957

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<210> 3958

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3958

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acagaagtgg cccggagctg gggggagatg caacaataag aaagatgctg agcttctggt   180

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<210> 3959

<211> 762

<212> DNA

<213> Homo sapiens

<400> 3959

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762

<210> 3960

<211> 553

<212> DNA

<213> Homo sapiens

<400> 3960

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gggatttctt caaatgctag taagcacaaa gagagggaga agtttttgta agtaacgaac 480  
agggccgggc atggtggcgt gagaggccga ggtgggcgga tcacgaggtc aggagttcga 540  
gaacanncct ggn 553

<210> 3961

<211> 737

<212> DNA

<213> Homo sapiens

<400> 3961

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tctcttgga gacagggtgt ctttctgcct tccaaggctg atgcctctcg tccccctccc 180  
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 cattacaac tcgttttctt gaantcttct tcttttttg acaccataga cgtctctctc 540  
 tgtgtcactt tctgattttt cttccattga ttctctgact tggctcctga actggttcct 600  
 gatttctcct gcctggcact ttagttgttc cctaagagtt ggttcttcac ctcttaactt 660  
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 ctggcattca actccaa 737

<210> 3962

<211> 680

<212> DNA

<213> Homo sapiens

<400> 3962

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 ttttttactg aagaaaactg taagtttata cttgaggact gaagtgtgac tctgccgatt 180  
 atcaggcttt caagatgaat ctggaaaaac tcagcaagcc tgaactcctg acactattta 240  
 gtattcttga aggagagctt gaagcaaggg accttgttat agtggcctac agagccctcc 300  
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 cacagtcact caggtgctct ccagattcac tagccaacaa gggccaatca agccagtctc 420  
 tcccaacagc tctccctttg gcacagacta tcgaaatcta gccaaactg ccaatccaag 480  
 aggtgacaca agccattcac ctactccagg gaaagtgtcc agtcccctga gccccctgtc 540  
 tccaggaatc aagtccccc ccatgccaga gctgagagag gaaaccctcc acccatccca 600  
 cccaagaaac ctggcctcan cccttctcca tctgctgaga gcaggcaccg aaaggtgatc 660  
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<210> 3963

<211> 600

<212> DNA

<213> Homo sapiens

<400> 3963

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taggtaagaa gtttcctgtt actgagaact caaagggtta caagttgctg ccaccttatt 180  
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aatataaata caattttaag tctttgtaag tgtttatgtt ggtataaatc tctgtgcatt 360  
gcttaagggtt tagaaataat actagtttaa gatacagagg tgccagccaa gccataactta 420  
ctcttccagt tgtcattgga caccctgaat gatgagtcta aagaagtatc attgtgaaac 480  
aaggaaatgt cactcacaga antattcctt ggcatataaa acaaagcctt gactctgctg 540  
gcataagtct gagttttcat aaactggagc ttcacaaatc tgtaaancctc ataanattaa 600

<210> 3964

<211> 728

<212> DNA

<213> Homo sapiens

<400> 3964

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atatttgtct tcattctgcg gagctcttgt gttgtaaagg tgcagaacta cgtaaaaata 180  
gtgttgggca gacttacata gtacatctga aatcagatac tggtttattc gaccatattt 240  
ctaagggcat ttttccagta aaattgtttt attttttgag tagccttcct atagtgggtac 300  
atgttacatc agttgcgcac atcttgattt tacagaatct gtcttaagta ccaattttgg 360

tttttcaaat caatgtttct gaaatttttg aacactgaaa gtggttttaa atgaatattc 420  
tgaatctagt tctttagaat cctctttgaa ttgtgaaatg caaaataatt gtttagcagtt 480  
taacctgaaa gatcttttta catgataaat gggggaggag aaagactgaa atgaaaatgt 540  
tgaagaccct gatttgaaat tgagtgtaaa ggctagatac tgtaagtttt agagtancit 600  
tagagacaaa gctagtatcc cacttgggga gatcaagtaa cttgtggntt aaaattttaa 660  
gtaaccagtg ggccatttta cttcactaat ttcncttggg ggggctaatt tttattgccc 720  
aagattgn 728

<210> 3965

<211> 817

<212> DNA

<213> Homo sapiens

<400> 3965

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gtgtgcatat tagagcacta atttgtttct ctctttcaaa gaactggatg aattgcctcc 180  
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tgaagggtta tcgtcntgaa cttgggttta aacataacga anttcaacat atgatnacca 780  
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<210> 3966

<211> 640

<212> DNA

<213> Homo sapiens

<400> 3966

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ctcactctta ggcttccaac ggaggtgcgt gtcttgcgtc gcgggggtccg ctttctcttg 180
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ggtcatcaca gagaaggaga cccaggatgat tctacttgac acacctggca ttatcagtcc 540
tggtaaacan aanaggcatc acctgaagct ctctttgttg gaagatccat ggaagagcat 600
ggaatctgct natcttgttg tggttcttgt ggatgtctca 640
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<210> 3967

<211> 631

<212> DNA

<213> Homo sapiens

<400> 3967

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cgtcgtctct gagggcgccc ggggtgggttt ccgctgtctg aagagttggg cctatTTTTTg 120
tgcacgtgtt tggngggctt gtgttgtttc tcttggaac gtgcccgggg ggaaggctgc 180
atcccaggag ttcaagatgg cggtgagcta tgattgcacc actgcactcc agcctgggca 240
acagagcaaa cccatctcta aaagaaagaa agaaatttta aaaaggagga aaggaaagaa 300
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aggagaaaan aggaaaggaa aaaggaaagg aaactgttcc cattaaacac taactcccca 360  
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 acaaccctgg gaacctcatg agtagaatca tacagtatct gtcctgttgt gatgagctgc 480  
 tttcacttag catagtgttt tcaaggttca ttctgttgt aacatgcgtc caaaatttct 540  
 tttcaggacn gtataagatt ccacggtctg tatacaccan cttttgttta tccattcatc 600  
 tgtggataac aatgctgctt canacatggt g 631

<210> 3968

<211> 709

<212> DNA

<213> Homo sapiens

<400> 3968

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<210> 3969

<211> 666

<212> DNA

<213> Homo sapiens

<400> 3969

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taagccagcc atataatata agagtaataa acttgcagac ccaaagaata aaataaattc 600
tccaaagcag anagattcgt gtgaccata tattaaaaga aagagaacaa gcancttang 660
aatgg 666

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<210> 3970

<211> 555

<212> DNA

<213> Homo sapiens

<400> 3970

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aaggcggcag gaagctggag cacgatcca ggaggaacaa tcctgcacca tgactcaaca 180
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ctccactgac accctgggtc ctgtccagac cagagcagg tgggcagcat gggcttggtg 420

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gagatgctgc accgctccaa ctttctggcc ttgatgggcg gtggtagtag tcccangttc 480  
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ggcctcccan aggca 555

<210> 3971

<211> 762

<212> DNA

<213> Homo sapiens

<400> 3971

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caggggtgag ggccggacct ccacgagcgg aatgcgaggt ccgagcctgt agggagaagg 180  
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ttgccggcta ctttgagact gtgctttatc agcacttcct aaaagatgat ggtgtgagca 420  
tccccgggga gtacacttcc tttctggctc ccattctctc ctccaagctg tacaatgagg 480  
tccgagcctg tanggagaag gaccgtgacc ctgaggcacc aaccaccact cagagaagga 540  
gttctgctcc tacctccaat acctggaata cttaagccag aaccgtcctc cacctaattg 600  
ctatgaactc tttgccaaagg gctatgaaga ctatctgcag tccccgcttc agccactgat 660  
ggacaatctg gaatctcaga catatgaagt gtttgaaaag gaccatcaa atactcncag 720  
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<210> 3972

<211> 711

<212> DNA

<213> Homo sapiens

<400> 3972

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tttgtattct accgcagcca gaggacatga atgaaagggt tttggaggca atgacagaaa 180  
gagctgagat ggatgaagtg gaacgtttcc agccgctgct ggatggatta aaaagtggaa 240  
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gcagacctca gtactataaa gttgatttga agaattgtatt tcccaaatag ntctgcacaa 660  
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<210> 3973

<211> 694

<212> DNA

<213> Homo sapiens

<400> 3973

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acctgttgca tttcccacag tgaccaatg aagtanatac tgttatcttt accaatttat 660  
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<210> 3974

<211> 526

<212> DNA

<213> Homo sapiens

<400> 3974

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aaaatgcaaa ctgnaatgaa actacattgt gtttctaagt gtgaaaacga caggctgccc 480  
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<210> 3975

<211> 743

<212> DNA

<213> Homo sapiens

<400> 3975

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aaagtgaggg tagcttttgt ggacatgctg ttgaagatca aagctgtgag ggctgctaag 180

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<210> 3976

<211> 757

<212> DNA

<213> Homo sapiens

<400> 3976

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 acctgccaga cccacaagcc ttgaagagag atgtcccctg tgataatgtc agcagctgtc 660  
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757

<210> 3977

<211> 640

<212> DNA

<213> Homo sapiens

<400> 3977

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tctggcactg ggatgcttcc acagatgtac ctgaaaagtc gtcactcttt caccaaggag 180  
gaagaagcag tacttttttg tctcatagca ttagtaacca agctaattgt caccagtctg 240  
tcattagctc ctggctcagc actgatcctg caaaagaccg aattgaaatc acaagcttac 300  
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gaaccgatgc agaagcaatt tatgttacta gacatctttt ttcgtagaag tactataatt 420  
ataagatttc agatagaaca tgcaattagc cttttgaaat ccagcttctg tgcaaaattt 480  
tagtatcaga aaatacgaga tttgcagggg aaacatcagt aaactacat taatgtcaat 540  
gccagtttt gacttttgnt agcctgacac tnccaaacag ttgtagaatc cgatanatga 600  
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<210> 3978

<211> 510

<212> DNA

<213> Homo sapiens

<400> 3978

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gtgatgtata tgcaaatiaa tttgcatctc ctggatcatat actaattggg tggtagagtg 180

ttagtagcca agaaacactg cttatggcaa gagaaagtca agtgaaagat taaagaaaat 240  
catgattaat aatctgccag ctgataaata agatagttat aacaccactt tggtagagggtg 300  
tacgcttttg gccatgtgta cactgggtgca ttttcaagac agtggctatc ttttcacttc 360  
tgtttggcta atcatgttat gttgttctga agttactgct gccctatacc cacttcacac 420  
agcctgagct ctgtctcctt ccaatgaaca tgaanatcct ttgattccnt agttcctggt 480  
tctgntctga ttccgacagg atgctggcat 510

<210> 3979

<211> 739

<212> DNA

<213> Homo sapiens

<400> 3979

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cacagagaaa tatcatcacc taggattcag gatgctggac ctgcttcccg agatgtccag 180  
gccactggca gaatcgaga tgatgctgac ccaaaagtag cacttgtaa cgattcttta 240  
tctgatgtca caagtaccac atcttctagg gtggatgac atgactcaga ggaaatttgt 300  
cttgaccatc tgtgtaaggg ttgtccgctt aatggtagct gcagcaaagt ccacttccat 360  
ctgccttacc ggtggcagat gcttattggt aaaacctgga cggactttga gcacatggag 420  
acgatcgaga aaggctactg taaccccgga atccagctct gtctgtagg aagttataca 480  
atcaattttc gggtaatgag ttgtgattcc ttcccatcc gacgcctctc cactccttct 540  
tctgtcacca agccagccaa ttctgtcttc accaccaa at ggatttggt ttggaagaat 600  
gaatctggca catggattca gtatggagaa gagaaagaca aacggaaaaa ttcaaacgtc 660  
gactcttcat acctggagtc tctctatcaa tcctgtccca nggggagttg tgccatttan 720  
gcggctcacg gaactatna 739

<210> 3980

<211> 736



<212> DNA

<213> Homo sapiens

<400> 3980

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agattaacgg ccgtcccgaa tatgcagcag aggcacaggt ctcccctact catttcaaaa   60
tatattagcc ttgctctaata tagatattaa attttaattc cgtaaactt ttttcttaag  120
tgcacaaagc atcgtactcc ctggaggcaa acacatcggg ctgcttcagc gtttagcgga   180
tgcttagcat tttgaatatt gtggcaaaaa aattaaaagt tcacttatta atatttatca  240
gcagtatcat aatttccatc ctcttatttc agaatttcac ttgaggcaaa aataccacaa  300
gtgtaattac tctagcacag ctattaatgt gctggatgat aggccactgc gtcacatgac  360
cttctattgt tcatgggttt aaagagaaag cagggccttg tatttctttt tcttctttta  420
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tttgtaaaag taaaccatgt ctgtttaaac aatagagggtg ttttaagaaga ctctttagtt  540
ttcctgcaga ttgttcaaga ttacatgata atcacacgga gtatttattt cctactgaca  600
aaccaagtac ttgttacatc accaatggta ccaggagatg aagaccnggt tttagacagg  660
agcgagatta ccacccaaaa aggagctcct gaggcagccc acttctanca aactttttac  720
atgttgcaaa tttcan                                     736

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<210> 3981

<211> 742

<212> DNA

<213> Homo sapiens

<400> 3981

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agaaacggca gtggcagcag cggtccggagc agccgcagcc ttctggaagc tccaggcgggt   60
ctttctgccg agcctcggtc ccggccccc cctccccgc cccatcggtt gttgtctggg  120
cggatttaaa cagtcaagtn aaatcaagct gggtaatcat ggcagaaggt ggatttgatc  180
cctgtgaatg tgtttgctct catgaacatg caatgagaag actgatcaat ctgttacggc  240
agtcccagtc ctactgnaca gacacagagt gtcttcagga attaccggga ccctctggtg  300

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ataatggcat nagtggtaca atgatcttgg tagcctggat gggtattgca ttgatcttgt 360  
 tcttactgag acctcctaata ctaagaggat ccagcctacc tggaaagcca accagtcctc 420  
 ataatggaca agatccacca gctcctcctg tggactaact ttgtgatatg ggaagtgaag 480  
 atagttaaca ccttgacaga ccaaacgaac gaagatgacc agagtactct taacccatt 540  
 agaactgttt ttcctttagt atctgcaata tgggatggta ttgntttcat gagcttctag 600  
 aaatttcact tgcaagttta tttttgcttc ctggtgttac ttgccattcc tatttacagt 660  
 atatttnagt gaatgattat attttttaa aangttacct ggggcttttt ttgggttgtc 720  
 ctaaaacttt cnaaacaatt tc 742

<210> 3982

<211> 799

<212> DNA

<213> Homo sapiens

<400> 3982

ataaaaaagt ttctccaaat gagctcatcc tgggctggta agttggggag gtgggggctg 60  
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 actcttcctt ttggaggcaa gagtattgca agtgtattac tgactgtgag cagtggctca 180  
 atgcctgtaa tcccagctgg gaggctgagg caggaggatc acttgagccc agtagttcaa 240  
 gatcagcctg aacaaaatag tgagaccctg tctctacaaa aacatttttt aaaaacttag 300  
 ccaggaattt gaagttgcag tgagctatga tcatgccttg ccaactgcatt ccagcctgag 360  
 tgacagagtg cgaccctgtc tctaaaaaac aaaaggaaag tgtgttacct gtaggaactg 420  
 tgaattcagt gggttttgct ggtggttctg atcctgtggg gccaggatat ttcgaattac 480  
 cttgtaagtg acttgaatt tttcatcagc actaagtcag cctttgattt tatttgacat 540  
 agttttcggg gtgtgtattg ctcttggcag ttggtgtcac taggtgtcct accngtagaa 600  
 gtgtccggtta ccctgaagac acccatgcca ctgttgtgtt tgatattgac gccacatata 660  
 gacaggagtc caccactgng tccatttcac aggtaccgct acgggccatg acatcacaga 720  
 gcactctgng ctgatccatg agttcctaca gccnagaagg cccccaaccc cattcacctn 780  
 acctgtggac acaagtctt 799

<210> 3983

<211> 613

<212> DNA

<213> Homo sapiens

<400> 3983

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attaagatat gaccacctg aataacctca catactcttc ctatctcaa actcttaact   60
taatcctatc tgcaaagtcc gttttgtcat atacagtagc atgttcatag gtttcaagca  120
tttgacatg gtcctctttg ggaggcatta cgctgcctgt gacagtgtc ttctgataca  180
ttttcagtga tcttctagac ataacaatcc tggtcctggg aacatgcatg gcggggacct  240
aaataagtct attttttaag aggccctacc ctttgcatag atcctaactt tggggtaaag  300
gaaagtttga gatttcactc cacctttttt tttggtgtc gtatttccac tgtgggaaag  360
atcattcgga ttttaacaacc acatgaagct cctggattat ctggggcatg tttgctgatt  420
ccaaggaag cttgatcttt ttgatggagc acttgagctg gtaagttatt agaagctgag  480
ctataatfff ccttggcatt ggtcattfff gtctaactct ttatfffftt gntffffttg  540
ttttgttttg ttttgttttg agatggagtc tcaactgtgc cccangctg gagtgcagtg  600
ggtgcnatct cgg                                                    613
    
```

<210> 3984

<211> 662

<212> DNA

<213> Homo sapiens

<400> 3984

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gtgctcagcg gcagccacta tggaggccgc caggaccgct gtactccggg tgaagcggaa   60
gcgcagtgcg gagccggcgg aggctcttgt gctcgcttgt aaacgcctcc ggagcgacgc  120
ggtcgagtca gcggcacaga agacgtcgga ggatttggag agagcggcgg agaataatgt  180
cttcacttg gtggccactg tgtgctccca ggaggaacca gtccagcctc tcctgcggga  240
    
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agttctgcgc ctgtcacggg acagccagca gcgtgtccgc cgtaatctcc gcgcctcggc 300  
 tcgggaggtc cggcaggagg gccgctaccg ggtgctttcc agccgccgat ccttggggac 360  
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 gggctttcag ttgttagacc ttgtccacga ggaggganaa cctgaagccg cctctgcagg 480  
 ctctgcaaa acatctgacc cagatgtgat cctctgcaat tctgtagagt tgatccgtga 540  
 gcgattgact gtgtctgagg atggaccagg agtcaagcnc caggaagaac aaaaacacga 600  
 tgactatntg tatgacatta ctacttggag acgccactcc aggctggatt gagaacattn 660  
 ct 662

<210> 3985

<211> 708

<212> DNA

<213> Homo sapiens

<400> 3985

gctggcgggc ggccgggtgg cggcggcggc atggcggagc cgagcggggc cgagacgagg 60  
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 cgagcctcgg tcaaggagtt caaagaggaa atctcccga ggtttaaggc tcagcaggat 180  
 cagctgggtc tgatcttcgc aggcaagatc ctcaaggatg gggacacact gaaccagcac 240  
 ggaatcaagg acgggctcac tgtccatctg gtcataaga cccctcagaa ggctcaagat 300  
 ccagctgctg ccaactgctt tccccctcc acacctgacc ctgcctcagc accctccacc 360  
 acgcctgctt caccgcccac ccctgcccag cctccacct ctggcagtgc ctcttcagat 420  
 gctggcagtg gaagccggag gagcagtggg ggggggccct ctccgggggc tggggaggga 480  
 tccccagtg ctactgcgtc catactctct ggctttgggg gcatcctggg gctgggcagc 540  
 ctaggcctgg gctctgctaa cticattggag ctgcagcagc agatgcancg gcagctgatg 600  
 tccaatcctg agatgctgtc acagatcatg gagaaccccc tgggtccagga tntgatgtct 660  
 aaccctgatc tgatgcntac atgattatgg ccaaccccc aatcanca 708

<210> 3986

<211> 618

<212> DNA

<213> Homo sapiens

<400> 3986

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agcggaaaac caattggttt aaaagaagag ccagtaagtt catgactcac gtggcctccc   60
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atcccccagg ctttgacgga agagtcgtgg tgtatcccag caaccagact ttaaaggact  180
acctcagctg gcgacaagca gattgtcaca tcaataatct ttataatata gttttctggg  240
cacttataca acaatctgga ctaacaccag tacaagccca aggagatta cagggaactc  300
ttgcagcaga caagaatgag attttgtttt ctgaattcaa catcaactat aataatgagc  360
tgccgatgta taggaaaggg actgtgttga tatggcagaa ggtggatgaa gtgatgacaa  420
aagaaattaa gctgccaca gaaatggaag gaaaaaagat ggagtgacc cggaccagga  480
caaagccagt gcccttgac tgcgatatca tcggggatgc tttctggaag gaacatccag  540
agattctaga tgaagacagc tgaccctttt gcgcttnant tctggtgtgc ttaaccatgc  600
aagcccttcc acctncca                                     618
    
```

<210> 3987

<211> 711

<212> DNA

<213> Homo sapiens

<400> 3987

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actgcgcgcc ccgcccggag tccccgccgc cgtcatgcag tccccggcgg tgctcgtcac   60
ctccaggcga cttcagaatg cccacactgg cctcgacctg actgtgcccc agcaccagga  120
ggtacggggc aagatgatgt ctggacacgt ggagtaccag atcctggtgg tgaccgtct  180
ggctgcgttc aagtcggcca agcacaggcc cgaggatgtc gtccagttct tggctctcaa  240
aaagtacagc gagattgagg agttttacca gaaactgagc agtcgttatg cagcagccag  300
cctcccccca ctaccagga aggtcctgtt tgttggggag tctgacatcc gggagaggag  360
    
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agccgtgttc aatgagatcc tgcgctgtgt ctccaaggat gccgagttgg cangcagccc 420  
 agagctgcta gagttcttag gtaccagatc cccangggct gcagggctca ccagcagaga 480  
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 ttttgaggag caagaccaag tggcanaaga gggctcgccc gtccagagcc tgaaggcgca 600  
 ggatgctgaa gaatccttgg aggangagga agcgtggac cctctgggca ttatgcgctt 660  
 caagaagccc aaanaaacat cgggtgtgaaa gggaanggac tgggccctgc a 711

<210> 3988

<211> 741

<212> DNA

<213> Homo sapiens

<400> 3988

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 tcctggtctc cattgcgggc aagaatgtca tgctggactg tggaatgcac atgggcttca 180  
 atgacgaccg acgttccct gacttctcct acatcaccca gaacggccgc ctaacagact 240  
 tcctggactg tgtgatcatt agccacttcc acctggacca ctgcggggca ctcccctact 300  
 tcagcgagat ggtgggctac gacggcccca tctacatgac tcacccacc caggccatct 360  
 gccccatctt gctggaggac taccgcaaga tcgccgtaga caagaaggc gaggccaact 420  
 tcttcacctc ccagatgac aaagactgca tgaagaaggc ggtggctgtc cacctccacc 480  
 agacggtcca gattaaagt ggctcagagt ctgtggtcta cacgggtgat tataacatga 540  
 cccagaccg acacttagga gctgcctgga ttgacaagt cgcaccaacc tgctcatcac 600  
 agagtccacg tacgccacga ccatccgtga ctccaagcgc tgccgggagc gagacttctt 660  
 gaagaaagtc cacgaaaacc gtggagcgtg gtgggaaggc gctgatacct gngttcgcgc 720  
 tgggcccng cccangaaca t 741

<210> 3989

<211> 846

<212> DNA

<213> Homo sapiens

<400> 3989

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aggattttca ttttcattta tggcacccgt tgtgtttgag aacatggacc aatttatgga   60
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tatgaaagga ttagaatgtg ccacagtgga gcttacacat gactgtttca actaaatatt  180
gcccagctgc ctctcctgca gtattatfff tttttttttg ctacttagtt aaattgctag  240
tgtctctaata ttcacacatt gtcagagctt tttttatfff gtaaataatac tgccacaata  300
aatgtatgtg atgttttcatt tattcaagat ggggtctgat aaactgtagg actaggagac  360
taagaagaga agtcaatfff gagtagaatg tgcattcttc aaataatatt gctgggacct  420
tctttggata ccttgtttga ctgtactcat aaaatagcca gagagtgact gttagaccg   480
tacacactta atgggttttc aagaagatgg gattgttttt tcttggccat ataataataa  540
tgtataataa atttgctctc tttgtaatta aaattaagag acagtagctc agctaggcct  600
tttaaagtgc tatataaccc aacaccacca taagtcacgc tcaatfffft gtgacctgtt  660
tttctcatgg gctactcaaa gatttttttt ttttaaggca cancaagatg aggttttaaa  720
aangctttgt tagggcaatt agacattttc atttttcaag ctgattatag catttatcct  780
tacattggaa atttagtatt tgcattttgc cttttccnct taaaatgtn cccaccaat   840
ttggnc                                     846
    
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<210> 3990

<211> 715

<212> DNA

<213> Homo sapiens

<400> 3990

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caaacttcat gtctttcaga atatcatcac cttgcagaa actggctctc tggacttcag   60
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aaagtcttgg taacgttgct gatgtaagca tttgtcagat cttcatggta tatttataca  180
    
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cctttgtttt taccatttc taattttaca ttcctgtctg aacagctttc tgtcttgaac 240  
 atatggcaga atgatgttta taatctcttg aagttgtctc tggttacatc tctccgtgaa 300  
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 caaatcagag gctcataatg accttagaaa ccacttagtg aaacctctca ttttgcaatt 420  
 gaggaatcaa gggaggaagt aaattctccc aaattattgg tggtgataaa aatggaactt 480  
 gggtttcctt cccttggttg agtgcttatt ttgctctgtg gtactgcctc atttctgctt 540  
 agccagtatg aacaggctct ggaattcaga tcccacttag tgatgtccta atcaaagtag 600  
 acatatggaa gtaaatacta ataaggcatt ccacagcctc tgtgtgaatt gatggctgnt 660  
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<210> 3991

<211> 535

<212> DNA

<213> Homo sapiens

<400> 3991

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 gccggctcaa tctgggcgag aaccagact tccaccgcan ccccgcaatc tgcagacctc 180  
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 ttgttgctca ggaggcacia tccctcgggg gccaatgtgt gcctgtggtg tgcgattcaa 420  
 acccgagagt gtccaatccc aaaaagccag gacgagttac caaccagctg caatacctac 480  
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<210> 3992

<211> 774

<212> DNA



<213> Homo sapiens

<400> 3992

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agacgagacg tctctccgga gcgggggcga gagcgggtcac ccacccgcag gagagacggc   60
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cgcaggagag ggggctcgcc cgagcgcagg gccaaagtcca ccgaccggag gcgcgcacgc   180
tccccgagc gcaggagaga gcggtccctg gacaaaagga acagagagga cagagccagc   240
caccgagaaa gggaagaggc gaatctgaaa caggatgccg gcagaagttc cagacatccc   300
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gagtcacatt ccaaccttta ccgtgtcaaa ggttctaaga ggaaagtcac aaacctgaaa   420
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gtatcatatt aaagaaagta tttttaaatg catacttttt tggaaattat ttgccaaatg   600
ctggcccaaa gggatataaa ttttgtttct acgtaacctg tanaatcgtc aagaattggt   660
cccgttttgg ggcaatcttt ttctctcctg gntaaatggg gcttggtgat cttttctct   720
acntaagggg aatttattgg ttaagtttaa ttaatttgat atanactgtc atgt       774

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<210> 3993

<211> 416

<212> DNA

<213> Homo sapiens

<400> 3993

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gaattggtgg gggccgcggt ctccgccttc tagagggtggc ggcctactgc cttcgggtg   60
ttgtgtgcaa agccccgttt cctgctccct gcgcttgat cctgctgcct tccctcctgc   120
tggtgaagct cgtgctgccc ttgctggcc tgtgctgcca ctgccgacc gtgtcccggtg   180
gtggagctgt cgtggggctc acgtgacttc ctttctaca ggcgccgag ctgggccaca   240
gcctgaacga gaacgtcctc aagcctgcgc aggagaaggt aacgggcagc tccgggtggt   300
tgtgcctgga gcccttcaact ccaggggacg tgggtgtgtc aggggtgtta gggggattgt   360

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ttgtccanca gctgggactc aatgaggcca ancctcacac ccnacctctc agcaca 416

<210> 3994

<211> 786

<212> DNA

<213> Homo sapiens

<400> 3994

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 gtcttttgct agtctggact ggagagcaac ttccctgagt caggactctt gctgctaatt 180  
 gcagaaaacc agcagtctct gtgaagtgt ggtgttctca gagttcagct gtaaaatata 240  
 gaatcctcat taattgtatt tacaactata ttgagcaaac caatgttggt ctttattaat 300  
 gtacagacca aaaaagacac ctcaaaagaa aggacgtacg cgtttcttgt aaacacgagg 360  
 caccccaaga taagaagaca gatagagcaa gggatggaca tggatcatct ctcagtgtatt 420  
 ggagaaagtt accggcttca gtttgatttt caagaggcag tgaagaattt cttcccccca 480  
 ggaaatgaag tggttaatgg agaaaattta agctttgcat atgaattcaa agctgatgca 540  
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 gttcttttag gttcaataga tgatgttttt aactgcaatc tgtcaccag atcatctctg 660  
 acagagcctc ttttggcaga attaccattt ccaagtgttc tggaatctga agagacaccc 720  
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 agactn 786

<210> 3995

<211> 752

<212> DNA

<213> Homo sapiens

<400> 3995

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 gtagctggga ttacaggaaa tgagaacaga agccattgcc agacctctgg aaataaacga 120  
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<210> 3996

<211> 786

<212> DNA

<213> Homo sapiens

<400> 3996

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<210> 3997

<211> 739

<212> DNA

<213> Homo sapiens

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<210> 3998

<211> 739

<212> DNA

<213> Homo sapiens

<400> 3998

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<210> 3999

<211> 585

<212> DNA

<213> Homo sapiens

<400> 3999

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<210> 4000

<211> 683

<212> DNA

<213> Homo sapiens

<400> 4000

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<210> 4001

<211> 262

<212> DNA

<213> Homo sapiens

<400> 4001

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cagtgtggtg gctctggctg ccttctccac ccaccccacc cctcactcag gtcgtgtttt 180  
caggagctca aggctggagt gtcttgacag taaggggagg ggagcggagg cggaggcncc 240  
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<210> 4002

<211> 615

<212> DNA

<213> Homo sapiens

<400> 4002

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<210> 4003

<211> 697

<212> DNA

<213> Homo sapiens

<400> 4003

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<210> 4004

<211> 651

<212> DNA

<213> Homo sapiens

<400> 4004

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attctgctca agaatctgtc ctcaagtgtt tcaacatcga gaattaattt gagacaaact 540  
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<210> 4005

<211> 813

<212> DNA

<213> Homo sapiens

<400> 4005

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<210> 4006

<211> 745

<212> DNA

<213> Homo sapiens

<400> 4006

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<210> 4007

<211> 597

<212> DNA

<213> Homo sapiens

<400> 4007

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<210> 4008

<211> 681

<212> DNA

<213> Homo sapiens

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<210> 4009

<211> 652

<212> DNA

<213> Homo sapiens

<400> 4009

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<210> 4010

<211> 730

<212> DNA

<213> Homo sapiens

<400> 4010

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<210> 4011

<211> 671

<212> DNA

<213> Homo sapiens

<400> 4011

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<210> 4012

<211> 737

<212> DNA

<213> Homo sapiens

<400> 4012

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<210> 4013

<211> 705

<212> DNA

<213> Homo sapiens

<400> 4013

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<210> 4014

<211> 797

<212> DNA

<213> Homo sapiens

<400> 4014

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tgccgttcac gccgcacatt gtgccgcctc gcctcacctc agcgagctca cttgctccac 720  
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<210> 4015

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4015

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tt 662

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<210> 4016

<211> 824

<212> DNA

<213> Homo sapiens

<400> 4016

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 ggataagang gaagaaaatg accagtcaac tcataaagtg gatggtatat gtccgagggt 720  
 cccgtanaga acccagcatt aatcattttg tcaagaaggt ttgntcttc cttcatccta 780  
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<210> 4017

<211> 613

<212> DNA

<213> Homo sapiens

<400> 4017

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<210> 4018

<211> 587

<212> DNA

<213> Homo sapiens

<400> 4018

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<210> 4019

<211> 598

<212> DNA

<213> Homo sapiens

<400> 4019

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<210> 4020

<211> 568

<212> DNA

<213> Homo sapiens

<400> 4020

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<210> 4021

<211> 603

<212> DNA

<213> Homo sapiens

<400> 4021

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<210> 4022

<211> 598

<212> DNA

<213> Homo sapiens

<400> 4022

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<210> 4023

<211> 650

<212> DNA

<213> Homo sapiens

<400> 4023

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<210> 4024

<211> 775

<212> DNA

<213> Homo sapiens

<400> 4024

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tcaaggagaa ttccacagtt atcanagacc ctgtcttcct tgttcaccac tatattaccn 720  
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<210> 4025

<211> 623

<212> DNA

<213> Homo sapiens

<400> 4025

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<210> 4026

<211> 622

<212> DNA

<213> Homo sapiens

<400> 4026

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caatggagat aatttagtat tactaacata gtatttatag gcttaagaca aatgtacttg 180  
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<210> 4027

<211> 796

<212> DNA

<213> Homo sapiens

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796

<210> 4028

<211> 541

<212> DNA

<213> Homo sapiens

<400> 4028

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 ttcacgaccg gcgcgacgcc caagacgccg aggcgcgccat ggacggggcg gagctggacg 480  
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<210> 4029

<211> 762

<212> DNA

<213> Homo sapiens

<400> 4029

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 agaggatcac ttaccaggac tgctttgaac ttaatagcaa tggtaaaagc aaacagacaa 180  
 gcaactactt caaatgttg aaaagaaaat tatttccagc ttccaattct atactcagac 240



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<210> 4030

<211> 704

<212> DNA

<213> Homo sapiens

<400> 4030

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 gaaaagatgt ggagattctc acccgagtc cccagtgggc ttcgggcata tgagtactac 240  
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<210> 4031

<211> 546

<212> DNA

<213> Homo sapiens

<400> 4031

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gagttcacct ctcccacat ttcactccaa aggtgagata aggtanagtt gctaaaggtc 480
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tcatct 546
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<210> 4032

<211> 653

<212> DNA

<213> Homo sapiens

<400> 4032

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ctggggcccc atgaagcaat tatatacaat cataccgttc accacttgtg aattcggtag 180
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<210> 4033

<211> 690

<212> DNA

<213> Homo sapiens

<400> 4033

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<210> 4034

<211> 605

<212> DNA

<213> Homo sapiens

<400> 4034

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cacttcctg ggttgagggt gagtctggcc agttctgggc agacagggtg gagcgtgcca 540  
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<210> 4035

<211> 637

<212> DNA

<213> Homo sapiens

<400> 4035

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gtggtggttt cagtggctgg tgccttccga aagggaaggt ccttcattct ggattttatg 240  
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ttccaaaagc ctttncagac actgatgntt ttggnta 637

<210> 4036

<211> 659

<212> DNA

<213> Homo sapiens

<400> 4036

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agcctctaca agaagctgct gactcttttc agagctggcc acgaccaggt ggtggctcctg 180  
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cactgccttg agagccccac agagctgtct cagagcagcg acagtgaggc cgggtgaccct 420  
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<210> 4037

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4037

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 ggccaccatg gggccctgcc tggcccccg gcccggttc tgggaccca ttggacnata 660  
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<210> 4038

<211> 483

<212> DNA

<213> Homo sapiens

<400> 4038

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 tccccccaa agtccatttc tgttcagtgc ctgaaaatga ggaggatgcc tccctgaaga 420  
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<210> 4039

<211> 617

<212> DNA

<213> Homo sapiens

<400> 4039

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aagcacattg cggaagangc tgaccgcaaa tacnaggagg tagctcgtaa gcttggtcatc 600
ctgganggtg agctgga 617
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<210> 4040

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4040

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aggactttcc aggtcaaggc anangaggtg tccggcccca acaggctcct gtgtgccct 660  
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<210> 4041

<211> 653

<212> DNA

<213> Homo sapiens

<400> 4041

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aaagatttta gaagaattta ggaaaacaca acagacatcc cctgacaagg tggattatga 540  
atatagttaa ctactcttat atcagaatca agttcttcgg gaagcaggtc tctatagaga 600  
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<210> 4042

<211> 721

<212> DNA

<213> Homo sapiens



<400> 4042

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 cagataaact gcgactaaag aaattacagg aagagtcaga cctcgaatta gcaaaggaaa 480  
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 ttatgccagt tttttggaag tcttagttcg agatgtgtgt atttcattgg aaattgatga 660  
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<210> 4043

<211> 699

<212> DNA

<213> Homo sapiens

<400> 4043

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 gagaataagc tagaaaaatc atctggtcaa ctgaacaaac aggaaaatga catacctact 360  
 gatcttgtcc ctgttaacct actattagaa gtgaagaagt tattaatatgc aattaatact 420  
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tataccgcac accagattaa tattgggttat tatttgacat tactggnttt atatggagta 660  
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<210> 4044

<211> 647

<212> DNA

<213> Homo sapiens

<400> 4044

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tccacaatga tcatatccag agtcccaaac atttctgtac atctgctaca tgaaccccct 180  
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acagtcttcc catttgatgt tgcgggttaa tttgnttcta ccaagtttga gcacctggaa 600  
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<210> 4045

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4045

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atgggatcat caacctgcaa agtctgaaga cccctacgct naagggtgttc atgcncgaaa 720  
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<210> 4046

<211> 492

<212> DNA

<213> Homo sapiens

<400> 4046

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gctgaccttt gggtgacctg gaaaggggga aagatggcta agcatggaga gaaacgaggc 180  
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<210> 4047

<211> 386

<212> DNA

<213> Homo sapiens

<400> 4047

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<210> 4048

<211> 712

<212> DNA

<213> Homo sapiens

<400> 4048

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 ttacctgata actctcaata attctaaagt ttatcttana gaaaagtctt tgagtcacct 660  
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<210> 4049

<211> 675

<212> DNA

<213> Homo sapiens

<400> 4049

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 aaaagcccct gggtA 675

<210> 4050

<211> 633

<212> DNA

<213> Homo sapiens

<400> 4050

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<210> 4051

<211> 721

<212> DNA

<213> Homo sapiens

<400> 4051

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 gccactact ttgtcttatt aggcagaata acaaaggaa aatatttaaa aagcaactag 480  
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 g 721

<210> 4052

<211> 648

<212> DNA

<213> Homo sapiens

<400> 4052

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 catactgtcc aaaagcaaag caaatcctga aagcagaaag agccactgga cacgtacaag 180  
 aaatcttcga taagattaat agccaatttc tcatccaaca tcatggaagt gagaaggcaa 240  
 tgagatgaca tattcagtgt gctgaaagga aaatcttggg tggctctgat acttgtagat 300  
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 gctctaagct gtatatgctt aaggattcac cccaagccca ataacacttt ggtttttttt 480  
 tagcctcata gagttactgc cttgatggtc ttggacaaga ttcaggattc tctggattac 540  
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<210> 4053

<211> 573

<212> DNA

<213> Homo sapiens

<400> 4053

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 tatcacttag actcataaat tcttatttta tgtgtgagaa agtgtgtatg tgtgacttac 420  
 aaatgtagct tatttgtata catgggtgtt aaaccgtatg tatgatttat atatactgta 480  
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<210> 4054

<211> 773

<212> DNA

<213> Homo sapiens

<400> 4054

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 ggtgtcttat aaatgtattg agagagggtg aggagtgtc tatagaatgg aatggagtga 180  
 ggtagagat cagtggcaag gaagaccaca taaaggtttt tgcacaaact tgcctttagt 240  
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 ataaacatta aaatttgccc aagactctta actcagttgt atttcataat taaagtgtac 360  
 attaaaaagc caaactagtc atgaaagtat tacatacagc aagggcagtt tagataagtt 420  
 aatgttgcta tgggaacccc agcagatctc ctgtgtctc cgtttaaaaa tcatggccca 480  
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 caaaaataca tcaaccaaatt ttgggactgt gagacacaaa ctggtctctt ttgggctctg 720  
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<210> 4055

<211> 584

<212> DNA

<213> Homo sapiens

<400> 4055

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nagctccnaa catccttggg gaaaggaaga gcatttattc gctactcctt ggcgccaccag  180
aggttggcag acacettaca gcagtgcctt atgaacacca aagtgaccag tgactggtac  240
tatgcaagaa gcccctttct gcagccaaag ctgagctcgg acattgtggg ccaactctat  300
gagctgactg aggttcagnc ngacctggcg tcgaggggct ttgacttgga tgctgcctgn  360
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agccgcagct ccagcatgag cagcttggtg agcagttacc tgcagactca agagatgggtg  480
tccaactatg acctgaacag ccncctaaac aacnaggcat tggagggctt tgatgagatg  540
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<210> 4056

<211> 664

<212> DNA

<213> Homo sapiens

<400> 4056

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agaaaccttt aatccaggcc taaatttgca tagacctgac attcagctgc cttgcagttg  180
cttcctccca tgagccaagg tgggtgcaga gggcaactgg atgactcgca gtaccacagc  240
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catcagtgtgt gtgggctggc tgcaagcctc gaaacagttc tcctggaagg gaggtttttg 360  
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 aataggaagt tgactcccag catgtaaaag tgatccacgc agccggagtg tatgccggga 540  
 gctaagtggg ctatgggtga acatatccca ccttgcttcc tgagtccttg gtcccaatct 600  
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<210> 4057

<211> 547

<212> DNA

<213> Homo sapiens

<400> 4057

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 agagagctct cagggccaga gcggggcagg aggatgcttt ccagcccca ccatggagct 180  
 gcgctgtggg ggattgctgt tcagtctcgc ctttgattca gggaatctag cccacgtgga 240  
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 cagtggcatt gcctcttccc ctgactatga attcaacgtg tggacccgac cagactgtgc 360  
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 gccaggaaaa ctcataaga tcaacattat gaacatgaac aagcagagca agctgtattc 480  
 ccagggcatg gccccctttg tgcgcacact gccacccgg ncacgctggg aacgcattnn 540  
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<210> 4058

<211> 632

<212> DNA

<213> Homo sapiens

<400> 4058

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 cctncacccg accagctgcc ccagaccca ccgtcaccac cgtcgcagcc tccgaccccc 120  
 gctacggcgc cctccacaac agaggtgccc ccacccccga ggacctgct ggaggcgctg 180  
 gagcagcgga tggagcggtg ccaggtggcc gcagcccagg ccaagagcaa ggggggaccag 240  
 cggaaagctc gaatgcacga gcgcatcgct aagcaatacc aagatgcat ccgagcccac 300  
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 cagggcctgg aggccaccaa gcccaccag cagagctctg tgggtgtcct ggagactgcc 420  
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 cagaacagcc ctgtggcccc cacagcccag cccaaagccc caccctcaag aactncccag 540  
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<210> 4059

<211> 778

<212> DNA

<213> Homo sapiens

<400> 4059

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 ttactgtta ccattatttc ctggctttac attggtttta gataatatct gtagggtata 180  
 gtataatgtt atccaaatat taaattacat atagtatgtt tagttttatt tagcattgtt 240  
 aagattactc agtgtcaaag ggagcatttt aaaattattt agtttttgag acgggggtctc 300  
 acactacccc aggttggagt atagtagcac aatctcagct cactgaagcc tctgcctcct 360  
 gggctcaagc agtcctccca cctcagcctc ctgagtagct tgagaataca ggtgtgcaca 420  
 ccacactgca ctgcttttta aattttttgt agatgtgaag tctcactgta ttgaccaggc 480  
 tgggtctcgaa cttaggagat caagcagtct tcctgcctca cctccaaag gtgctgggat 540

tacaggcatg agctactgca cctggccaga ggcaacatta aaaaaaaaaa aaaaagattg 600  
 ntgaggcttt ttaactcaca actcttggag acctaaaact tctggtatct caggcccttg 660  
 gtaaacttga agcttcagag aaaaganggt cagggggtag gacatggacc atttcagtta 720  
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<210> 4060

<211> 719

<212> DNA

<213> Homo sapiens

<400> 4060

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 tctgtgaaga atccaggggtg cctgtgaggt caagcgagga tcaacacaaa cattttccca 180  
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 gcattcagtt tggatcatctc atccctcttc taggtgctag tcacaggccc accccaacct 300  
 cataggatgt gtttgcacac agggccactt aataaatgtt atggctgcct tatttgctgt 360  
 gaactcttgt ctgtattcct gggccttggg agacctggga tgcccagtgg ctctgccttt 420  
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 tccagaccg tgtttgatca gcctcaggaa tacttcatgg anttgacatt caatcaactg 660  
 caaagggggt caacaaggag tcaccgtgaa cntnatggac acctgtgaac cctgaacgg 719

<210> 4061

<211> 638

<212> DNA

<213> Homo sapiens

<400> 4061

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 cccaggcatt tcagatgaga gatacttaag cctgtactaa ttttaattatg ttaaaggacc 180  
 caatatcttt acaaagaaag ctgctttttc cctggggaca actaaacata tgtgactatt 240  
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 cattgtcttc aactgacag tgaacatagt ggaggaggaa gtaggggctc tctttcttaa 360  
 gatgtgactg atgtaacccc ataagtcctt tgggagtgtg tgttcatttt aggaaccacg 420  
 tggcagtgtg gtggaataag aagggtttg gaccaggaa ggcatggctt ggtgaactgg 480  
 ctctgctact tattagctga tgcagtcagt agaaactttc ttaggtcca agggccttca 540  
 gtttctcatt ggtaaaatta aagnaagaaa attttccctt ancattgggtg taaggagtna 600  
 atgggaattt atatagaaca tctagcaaag taaatttg 638

<210> 4062

<211> 628

<212> DNA

<213> Homo sapiens

<400> 4062

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 ccaagccttg aaggacaggg agaatttggg caagccagac aacaaatcag acttcccaga 180  
 tggtgacatt attttttttag gtggtcttgt gggacattct ctgcctatct gaaggttaaa 240  
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 aaaacataga gccttgggag ccctagaccc ttttttttaa attttagtcc acttacagct 360  
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 ggtccctaag aagtggaggg ttgctcgaag tgaggagccc acagttcccg aatctcacta 480  
 gaaaatccca atgtgctaaa tcgtgctatt gatcctgact ggggagccag ccagctcaat 540  
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628

<210> 4063

<211> 545

<212> DNA

<213> Homo sapiens

<400> 4063

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 aatgcctcca agtggtcacc acctcagaac tataagaagc gtgtggcagc cttggaagcc 420  
 aagcaaaaagc ccagcacttc ccagagccag ggactgacac nacaagacca gatgattgct 480  
 gagcgcctag cacgactncg ncaggagaac aagcccaagt tagtcccctc acaggcagag 540  
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<210> 4064

<211> 672

<212> DNA

<213> Homo sapiens

<400> 4064

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 ctagagataa tctaacaatc ctgattanaa ttgctcccat atccctggtg accacaggct 660  
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<210> 4065

<211> 560

<212> DNA

<213> Homo sapiens

<400> 4065

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 ggtgtccggg tagggcaacg cggcgacacc cgaggcctgg tggcggcggc ggatcgagat 180  
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 aatggattga aattctgtaa acaaatactt tctaattcca aatttgcaga gcatggagaa 420  
 accttggtta tgaaaggatt aacattgaac tgtttgggga aaaaggaaga agcttatgaa 480  
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<210> 4066

<211> 690

<212> DNA

<213> Homo sapiens

<400> 4066

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gggaaccatg gacctaatac ctgagctttt atctcaattt tcaggagtga nacnttctgc 660
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<210> 4067

<211> 605

<212> DNA

<213> Homo sapiens

<400> 4067

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gctgggttgt tgacaaatta ctctcaggac tcagtgcact ttgaggatgt ggctgtggac 240
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aattttcacc aacaggagag aaaccatttt gganaggaac tgtttgactt tanccaatgt 540  
gaaaaacctt gagtgaacac tcatgcctta agactcacag gagaacttac tttanaaaga 600  
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<210> 4068

<211> 648

<212> DNA

<213> Homo sapiens

<400> 4068

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<210> 4069

<211> 612

<212> DNA

<213> Homo sapiens

<400> 4069

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 tcccggcggc gacgggacct taaggcctct gtgtggcaga aggatcagct ggtgacacag 180  
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 cacaagcgcc gggcgccaga gctgtaccgg gctccgttcc cgttgtacgc gcttcaggtc 360  
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<210> 4070

<211> 550

<212> DNA

<213> Homo sapiens

<400> 4070

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<210> 4071

<211> 605

<212> DNA

<213> Homo sapiens

<400> 4071

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cttccttcag tctcgcaaag ctgtcttcat ttacctcca taagagggtg ggagtcgtgt  540
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gntaa                                           605
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<210> 4072

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4072

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gaaccgttca ggtcctgaag cggtcaggcc gagagctgat tgagaatagt cgagatgaca  180
ccacttgggt aaaaggacag ctccaggaac tgagcactcg ctgggacact gtctgtaaac  240
tctctgtttc caaacaagc cggcttgagc aggccttaaa acaagcggaa gtgtttcgag  300
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acacagtcca catgctgttg gagtggcttt ctgaagcaga gcaaacgctt cgctttcggg 360  
gagcacttcc tgatgacaca gaggccctgc agtctctcat tgacacccat aaggaattca 420  
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ccttgtcaga actggtggct aatgctgagc tcctggaaga acttttggca tggatccagt 660  
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taaaaccctt atcgctgac 739

<210> 4073

<211> 805

<212> DNA

<213> Homo sapiens

<400> 4073

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agttatagcc tctaaagcct gtggtathtt atataatatt tttataactt taagagactg 180  
tagtaattga cctaaaaact tatgttagct tcagtaaaag tacttttatt gtaaataaac 240  
aatcatgaac tcaacactct gcctgaatat atgccagttg tctttcataa tcaatgttta 300  
gataaatgat tgccactttt tatatggttg tttagtttca agcaatatga tgtacattac 360  
ttttgagaaa cagtattttg actaggacct ctcttatttg tcagcacaga actgattaat 420  
atgtaatgct acctgctaata taaaatgtaa aatcaagtaa agaaaacatt ttaaaattac 480  
aattagcaga gcagttcatg ttttaaggga tcacttttat tagtattggc aatattattt 540  
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tagaagttgg aggtatataa atagaacatt ttgctaaagt gaaaaatttc caagttctct 660  
agcataactt ttacatttaa tttttcatat gaaatagcaa ttagttacct gctgggttac 720  
attgggatgt ttatgtatgg caatggtttt ggctttacag cntaatttat atngcttttt 780  
caaatgatgg anctgcataa atggg 805

<210> 4074

<211> 757

<212> DNA

<213> Homo sapiens

<400> 4074

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cccagaagat ggaagccaat gccagctcag caaaacaaca gatgagtggg ccagcctgag   60
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tccaaattct gaaagtgtg ttaataaggc agaagtggc cttagattcg gatttcctag  180
cacatgctgt cccctgtac tgggaggtgc tggctgtgtt ctaggcctgc ctcattgggta  240
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catgtttttc tcttttttgg ttcagttcct tgttttaagc agtggatctt tcagtagctt  360
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attctaccct gatttttttag agatagctga gctgggtacc cttattcttt agagatagtt  480
gagctgggta taaattcacg actggaaata gttccctcca ccatttcaaa gacatttttc  540
tatttttate ttgcttccca tgttgaagac attcaacatt gtgattccaa aatcattgta  600
ggagacctgc ttttttatct ctggaaactt ttaggatctt ctcattatcc ctagatctgg  660
aattccngt gtgtgtgtgt gtncatca tgctgggtat ctgcanaggg aggctttgat  720
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<210> 4075

<211> 731

<212> DNA

<213> Homo sapiens

<400> 4075

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agagtttcgg aggcggtgac cgtgacgtag aagggtggaga ccgcttcacc ctgatcaggg   60
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gtggccttgt gtttcagagt ttaccaccta ggatgacttc agtgactaga tcagagatca 180  
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cggcgagcaa gtatgaaaga aacgaaccgg cggaagtcgc tgcattccat tcaccagggc 360  
atcacagagc tcagccggtc tatcagtgtc gatttagcag aaagcaaacg gcttggctgt 420  
ctcctgcttt ccagtttcca gttctctatt cagaaacttg aacctttcct aagggaact 480  
aagggttca gtcttgaaag ttttagagcc aaagcatctt ctctttctga agaattgaaa 540  
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ggaaaagcat cagatttttc tttggaagca tctgtggctg anatgaagga atacataaca 660  
aagttttctt tanaacgtca gacttgggat cagctctgct tcactaccag caggaggctn 720  
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<210> 4076

<211> 647

<212> DNA

<213> Homo sapiens

<400> 4076

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tcaggccgag acaccttgca gctgccgccg ccgccaccga gccgccgctg tgctcactga 180  
tccgcctcca gggccaccgc catgtcagc cgcggtggga agaagaagtc caccaagacg 240  
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aaaggccacc ccaagtacag gattggagtg ggggcacccg tgtacatggc cgccgtcctg 360  
gaatacctga cagcggagat tctggagctg gctggcaatg cagcgagaga caacaagaag 420  
ggacgggtca caccgggca catcctgctg gctgtggcca atgatgaaga gctgaatcag 480  
ctgctaaaag gagtcacat agccagtggg ggtgtgttac ccaacatcca ccccgagttg 540  
ctagcgaaga agcggggatc caaangaaag ttggaagcca tcatcacacc acccccacca 600  
aaaagccaag tcttcatcca naagaacctg tatctaaaaa agcanga 647

<210> 4077

<211> 711

<212> DNA

<213> Homo sapiens

<400> 4077

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agagCgtgga gCgctgcgcg gCgCggCggc cgggccctcg agacggggac ggacacacca 60
gcccctcaga taccacttgg ccaactccgc tgaggccact cccactgcgt ggctgaagcc 120
tcgaggtcac caggcggagg cgcggagatg cccctgcatc agctggggga caagccgctc 180
accttcccca gcccgaactc agccatggaa aacgggcttg accacacccc acccagcagg 240
agggcacccc cgggcacacc cctgagcccc ggctccctcc gctccgctgc ccatagcccc 300
ctggacacca gcaagcagcc cctctgccag ctctgggccg agaagcatgg cgcccggggg 360
acccatgagg tgcggtacat ctcgccggg cagagcgttg cgtgcggctg gtgggccttc 420
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gccgcattcc tgcaggggat gactgtgaat ggcttcatca acacagtcac cacctccctg 540
gagcgccgct atgacctgca cagctaccag agcgggctca tcgcagctnc tacgacattg 600
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<210> 4078

<211> 596

<212> DNA

<213> Homo sapiens

<400> 4078

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actctaattg gcaagtgcac tgctagtcag tctggggcaa cattctttag catctctgct 180

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tcaccccttaa cttctaaatg ggtaggtgag ggggagaaaa tgggccgtgc attgtttgct 240  
gttgcaaggt gtcagcaacc agctgtgata tttattgacg aaattgattc cttgttatct 300  
caacggggag atggtgagca tgaatcttct agaaggataa aaacagaatt tttagttcaa 360  
ttagatggag caacaacatc ttctgaagat cgtatccctag tggtagggagc aacaaatcgg 420  
ccacaagaaa ttgatgaggc tgcccggaga agattgggtga aaaggcttta tattccccctc 480  
ccagaagctt cagccaggaa acagatagta attaatctaa tgtccaaaga gcantgttgc 540  
ctcantgaag aagaaattga acagattgnc agcagtctga tgccttttca ggagca 596

<210> 4079

<211> 694

<212> DNA

<213> Homo sapiens

<400> 4079

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aactccctat gctttaggga gctttttggt ttaaaccctac tggtagact tgtgggtttt 120  
aatgttttca gctgtggttg taagaaacac attttaaatt gcacctagta tagacataca 180  
tgtaaaacaa acaaaatttt tacgaagtag tacttgtatt aagagtgatg tactctgcta 240  
tcttctatct cattttttta aagttgatat tgctgcctta aattgatttt ttcaaccact 300  
aatgagtcag gaccactat ttaaaaaata ctgggtgtgtt ctcttgctgt tacgaattaa 360  
cccaaaactt agtggtttta agcaataaac ttgtgtttat ctcattgtagg ttctgtgggt 420  
caggaatctg ggagtagctt acttaggtgg ttctgggtca gggtttttca tgtggctccg 480  
cgctctgctc cagccaaact tctgcagacc atgtgcagcc gaggcgagga aacttctctc 540  
cacctattgg ggctggaggc ctgagtcaca agccccttgt ttacataaag tgtttaaggt 600  
agcacaagtc cttgagatgc tcggggtaga gatgganaac cactgcttcg tatecttctg 660  
ccgcttctgc ttganatctc tngccttacc cttg 694

<210> 4080

<211> 758



<212> DNA

<213> Homo sapiens

<400> 4080

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gctggaaccc ggcgccgaga gtagagaaaa ggggcctctg gtgaccgccc ctacctggca   60
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cgggtagcgg cgcaactgggt acaggcgcgc gcttggctgt cgcctctgcc gctgtgtttg  180
ggaggactcg aactggcgcc aggaaatatt aggaagctgt gatittcaaa gctaattatg  240
aaaacattta tcattggaat cagtgggtgtg acaaacagtg gcaaaacaac actggctaag  300
aatttgcaga aacacctccc aaattgcagt gtcatatctc aggatgattt cttcaagcca  360
gagtctgaga tagagacaga taaaaatgga tttttgcagt acgatgtgct tgaagcactt  420
aacatggaaa aaatgatgtc agccatttcc tgctggatgg aaagcgcaag acactctgtg  480
gtatcaacag accaggaaaag tgctgaggaa attcccatit taatcatcga aggttttctt  540
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aaaacccttg tgaactaagt atgctgtatt ttagcccctt gacactatat ggaatagaac  660
tatttcctga ctattccata tgaagaatgt aaaaggagga agangtaagt ttttgaacca  720
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<210> 4081

<211> 734

<212> DNA

<213> Homo sapiens

<400> 4081

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ctcggatgtc cggaggctcc tgggctgagc cggcgacaga gcccgggaag gcagcgagac   60
gtgggcgccc gcccagcccc ctcccgcgtc cttcagcccc aagccccgag cccctctgac  120
ccttccgcag ccttccctcc agccgcgccc ggcctccggc agctccctgt acgcctccct  180
ccccctgccc gcccctccct cccacagccg cccatgacgc cctctcggca cctcttccca  240
ctctgccacg cgctcttttc ctgcaccttc gcccgcgta cctactcctg ccccgccctg  300

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ccattcctct cccctccctt ctctctgcga cccctccctg ttaggccccca gcctcttctc 360  
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 gtgtcttgtc tcagagcccc ctcggggttg gagtaggttg tggagcagca caactgggct 480  
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 catgtgacaa tggagggctg cggcttcctt gcggagagca caagtgagct cactgccctg 600  
 gactccaggg aatcagagtt ctggccgagg ggtgaccag ctctctgct accatgaata 660  
 ggccccctct gaaancggtc caggatcctg cacatggcgc ttgaccgggg gcctnagaac 720  
 cccttnttgc aaaa 734

<210> 4082

<211> 652

<212> DNA

<213> Homo sapiens

<400> 4082

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 ggggcgccag cagcgcggaa ggccgggcacg cgggccatgg ctccctgggc ggaggccgag 120  
 cactcggcgc tgaaccgct gcgcgcgggtg tggctcaagc tgaccgccgc ctctctgctg 180  
 accctactgc tgcagctcct gccgcccggc ctgctcccgg gctgcgcgat ctccaggac 240  
 ctgatccgct atgggaaaac caagtgtggg gagccgtcgc gccccgccgc ctgccgagcc 300  
 tttgatgtcc ccaagagata ttttccac tttatatca tctcagtgt gtggaatggc 360  
 ttctgtctt ggtgccttac tcaatctctg ttctgggag caccttttcc aagctggctt 420  
 catggtttgc tcagaattct cggggcggca cagttccagg gaggggagct ggcactgtct 480  
 gcattcttag tgctagtatt tctgtggctg cacagcttac gaagactctt cgagtgcctc 540  
 tacgtcagt tcttctccaa tgtcatgatt cacgtcgtgc agtactgtt tggacttgct 600  
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<210> 4083

<211> 700

<212> DNA

<213> Homo sapiens

<400> 4083

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gaggccgcag cagtcgccgc gcgaacatgg cggccgaaat ccactccagg ccgcagagca   60
gccgcccggg gctgctgagc aagatcgagg ggcaccagga cgccgtcacg gccgcgctgc  120
tcatcccaa ggaggacggc gtgatcacgg ccagccagga taatggagct gtaatggaat  180
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acaagtgtgt gagctggatg tgcacgcgga gcgggaacat gtcgggagg cacttcttca  360
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tctcaggagc atntgacaac agcatcatca tgtgggacat cggaggaagg aaaggccgga  600
cgctgttact tcagggccat catgacaagg tgcagtcctt tgtgctacct tcagctnacc  660
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<210> 4084

<211> 639

<212> DNA

<213> Homo sapiens

<400> 4084

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actcaacttg ttgataacct agttgagcac attcttaaat atgaggaatc tctagctgac  120
tctgacaata aaggtgtgaa ttctggaaga ttggtggcct gcataaccac tttgttctta  180
ttcagcaaaa taagacccca gctcatggtt aaacatgcaa tgactatgca accatacctt  240
accactaaat gtagtacgca aaatgatttc atggttatct gcaatgttgc aaaaatccta  300
gagctagttg taccactgat ggagcatcca agtgaaactt ttcttgccac tattaggaa   360

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gatctaataga agctcatcat caaatatggc atgactgtag tgcaacattg tgtgagctgt 420  
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 agatactatg gtgccatttc aaaattaaaa agtcaacacc aagaggaccc aaataacact 540  
 tcacttctaa caaacaancc ancacttctt agatcccttt tcaccgttgg agcactatgt 600  
 ccngcatttt gantttggat ctggaagatt ttaaaggna 639

<210> 4085

<211> 583

<212> DNA

<213> Homo sapiens

<400> 4085

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 tgtgtgtgtg tgtgagagag agagagagag agagagagag agagagagag agaaagagag 180  
 agagagtctg tgggttattc ccatttgaca gattggaata ttaaggcaaa aagatactaa 240  
 gtattttgtc caataacctca tagccattga cagagatggg aataaaaatt ggcctatgta 300  
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 cacacacaca cagcccacaa ggaaatgcct gacaattacg ctccatgttc tgaaactgac 420  
 gtgtcatcat caccacagaa ttgccattt atgcctcagt ttaccaact tcanagtaga 480  
 gaaacatttc aacatttaat tttacttgcc angataatgt atgaattagg taatgcntat 540  
 aaagaagtgg tttgatgagg ggaaaagctc tancnaaaa gcn 583

<210> 4086

<211> 561

<212> DNA

<213> Homo sapiens

<400> 4086

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 tagactaatg actgtccgaa acatgcctc catctgtaat atgggcacca atgcctctgc 180  
 tctggaaaaa gacattggtc cagagcagtt tccaatcaat gaacactatt tcggattggt 240  
 caattttgga aacacatgct actgtaactc cgtgcttcag gcattgtact tctgccgtcc 300  
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 gtgcctggcg gaccttttcc acagcattgc cacacagaag aagaaggttg gcgtcatccc 420  
 accaaagaag ttcatttcaa ggntgagaaa agagaatgat ctcnttgata actacatgca 480  
 gcangatgct catgaatttt taaattantt gctaaacact attgcggaca tccntcagga 540  
 ggagaagaaa caggnaaaac a 561

<210> 4087

<211> 674

<212> DNA

<213> Homo sapiens

<400> 4087

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 cgggaactgg cgaggtagtt ccttcgcggt ggagagacct ggaatggcca aatatcaagg 180  
 tgaagtcat agtttgaaac tggatgatga ttcagttata gaaggagtaa gcgaccaagt 240  
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 gcttcanaca gaacaggatg cacctgctgc cactcgacag cagttctaca ctgacatgta 420  
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 tccaatctgt agacaaacgg taaccttact cctaacagta tttggtgaag atgatcangt 600  
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 ggcaaacc agnt 674

<210> 4088

<211> 666

<212> DNA

<213> Homo sapiens

<400> 4088

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attactaggg caagagctag cctgggaaac ctaagtctgc acattttccg ccgtgttgca 180
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ttttctttct taaatcctgt gctttgtctc ctgggtgatt tctcttcaag tcanttggtg 540
gaggtgccta agaacaacgc taacacgggg ctcaaataag ttggcanat atagttgatt 600
ttgggcaaag gttgttgaac agtccannaa aatttcttga gaagagaaaa ngaaggtinga 660
aagggg 666
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<210> 4089

<211> 559

<212> DNA

<213> Homo sapiens

<400> 4089

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cgaagcacct cagagctcct tcgagcgtat cccttcggga aagccccacg ccttccccga 180
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ggcgcctcct cccgcctgca gcacgccctc gtcctgcact tcctcctcgg aatctgcaag 240  
 acagagtcta gctctttcac ccaggctgga gtgaagtggg gcaatctcag ctcantgcaa 300  
 cctccgcccc ctgggttcaa gtgattctcc tgcctcagcc tccccagtag ctgggattac 360  
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 naagattgcg aaacaatgga agatgtatac atgggttcag ttngaaacag accggaggag 540  
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<210> 4090

<211> 791

<212> DNA

<213> Homo sapiens

<400> 4090

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 ttaagatatt cttcaagatc tggaggccat cctttaagct tcttgcaaca gtctgggagc 180  
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 gcaggtgtct ggaaagatgg ctgaatagga acagctctgc tctgcagctc ccagcgagat 360  
 caacgcagaa ggagataatt tctgcatttc caactaaagt acccagctca tctcattggg 420  
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 caagcagaaa actggggcaa ccattttggg gcagacactg ggcctagcaa caaggagttt 720  
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<210> 4091

<211> 647

<212> DNA

<213> Homo sapiens

<400> 4091

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agcagcatgg cgagtgtcct gtcccgacgc cttggaaagc ggtccctcct gggagcccgg  180
gtgttgggac ccagtgcctc ggagggggccc tcggctgccc caccctcgga gccactgcta  240
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gtggaggagg tgtggctggc agagctgcan ggcccctgtc cccaagcanc anccctggag  540
cccgagccc aagccctggc ctacaggccc gtctccaaga acatcgatgt cccaagagg  600
gaaatccgn cgcantggga aatggntgaa natgatggng ggcatgg                      647

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<210> 4092

<211> 658

<212> DNA

<213> Homo sapiens

<400> 4092

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aatcagccag cagccaagt acacttgctc tttctgtggc aaagtaagta aggcaaagtc  180
tctggtgaga ggagaggag ggcaggtttc ttaccaagt gaggcctgac ttcaaggtat  240
tttataagcc gtgtgctggt gggcagttgg aattactcat accgttgatt atgagtttta  300

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agataaaagt gttgatggta acttcagatt ttgtgagacg tttttcattt aaagaaaacc 360  
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tgctttgtgg gaaatgattc catcagtttt gtctactgat gtttctgcac caactcccaa 480  
aatgtctgtg catctaatac cattctactt gttctgcgag ggatttttgt ttgataaang 540  
tttgaacgtt tatgtgcaaa atactgcatt acagcaatcc ttggtttggt tttgagggag 600  
aaanggaggc tttcanaatc cctgacaata aaggngaatc caaaatttan acntctgg 658

<210> 4093

<211> 680

<212> DNA

<213> Homo sapiens

<400> 4093

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gaaccggagc atggaggcgc acaacatcct cagcaaacgg ggattcagcg tccgatacctt 180  
tggaacaggg actcacgtga agcttccagg accagctccc gacaagccca atgtttatga 240  
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tacacagaat gggattttac atatgctgga cagaaataag agaatcaagc cccggccaga 360  
aagattccag aactgcaaag acctgtttga tctgatacctc acttgcaag agagagtgtg 420  
tgaccaggtg gtggaagatc tgaattccag agaacaggag acctgccanc ccgtgcacgt 480  
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tgagctctgc cagtgtatcc agcacacgga agacatggag aacgagatcg acganctgct 600  
gcaggagttc naggagaata tggccgcacc tttctgcana ccgtctgctt ctactgagcc 660  
aagngcccg atggganccg 680

<210> 4094

<211> 525

<212> DNA

<213> Homo sapiens

<400> 4094

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 tctccacttc cgtgagcctt cctctaagtg agatcggggg ggagataatg aaggccacaa 180  
 ctcccaggag gctccacgcc gggcggtcag ggacgctcgc gaggacgcat gggccccccag 240  
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 gaagcgggag gatcctttga ggccannagt tccaagctgc agtgagcccg tgatcgacc 480  
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<210> 4095

<211> 703

<212> DNA

<213> Homo sapiens

<400> 4095

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 agaggtcact gcccgaggga ggacagggca tgctgccagg ctccagggga ggagccccag 240  
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 tcacttcatg ttcttctca gatgagaggg aggggtgggca cccccaggaa tctcttcct 360  
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 aatctgagag cagaggccct ggtcccaggc ccagccctgc atcgccccan gagggcagcc 480  
 cgcaagcttc aacaccacag ctcangcatt ttgcccaagt ggacactana tgcttcacag 540  
 tcttcactct tgggagacgg atggggaaca agccaagtgc cttgaaagaa aaaggaggca 600

agggaaggcc caaaaccang cnanggaagt aaagagtga aggaacaacc aagcctgcag 660  
agaatggaga cgtccaacct ganantcacc ttgacttctg caa 703

<210> 4096

<211> 578

<212> DNA

<213> Homo sapiens

<400> 4096

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gctcacatgg tccagaagca tcagggtctt ttttaaccag aatagtcaag ccttggtttc 180  
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tactccaaac attaggagct tttaccagta agcaaggggt gggaagcttt tcctttcttg 300  
aagatgctgc cagcgtagtt tcccttgtag ctgccatcct gggtgcatga cttgcaaaac 360  
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tgtggntcct tacaaaaggc gaagtgaagc ttgatctttg ttggggctgt tgtagctcaa 480  
cggnaacatc actgggttgt ttccncantt taattttccc aaaaccttta cccattatct 540  
gcagattttc acatctaagc aaaatanggn tcatatga 578

<210> 4097

<211> 823

<212> DNA

<213> Homo sapiens

<400> 4097

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gctcaggtcc ggataggggg caagggtaca gctcgcagaa agaagaaggt ggtacataga 180

acagccacag ctgatgacaa aaagcttcag agttctctaa aaaaactggc tgtgaataat 240  
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 aatcccaaag tccaagcttc cctttctgct aatacctttg caattactgg tcatgcagaa 360  
 gccaaaccaa tcacagaaat gcttcctgga atattaagtc agcttggtgc tgacagtta 420  
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 gaggcacaa agaatgaagc taactaaaag tttggttttt gggaagctgg catggactag 600  
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 actaagttca agtaataataa ataattttgt atattaataa atgctgtttg gttcnagcaa 720  
 ttttttcggt cattttgatt tttgcatttt tggcacttcc ctcccaaagg aanatttttt 780  
 ttgggccaaa aattangaaa ntattgggng caattttgan ggg 823

<210> 4098

<211> 758

<212> DNA

<213> Homo sapiens

<400> 4098

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 gggcggccgg gggctcagag atccaagtgc gcgccctggc ggggtccggac caagggatca 180  
 ctgagattct gatgaacaga cttctgccc gcaatgcctt ggggaatgtc ttcgtcagt 240  
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 ctgagaggct gccccgttgt ctgggggttg ncctggcgaa ggagctcatc ttcacgggcc 540  
 gacgactgag tggaactgag gccacgtac tgggggctgg tgaaatcacg ctgtggccca 600  
 naacgaagga gggggaacgc cgcctaccaa cgggcacnaa cactgggccc aaggagnttc 660

ctgccccaaag gcccccaatt gcccggttcng gctggggcaa aagttagcca atttaacccg 720  
naggggaaccg gaggttggna aattgcaatc tngggant 758

<210> 4099

<211> 881

<212> DNA

<213> Homo sapiens

<400> 4099

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tcaaccaggt gctaggaata ctgtgtatct atcattagct atatgggact atattgtaga 180  
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catcccttta aaaataacaa cagaaaatac aactcctggg aaaaaaggtg ctgattctat 360  
aagattatth atatatgtaa gtgttttaaaa agattattht ccagaaaggt tgtgcagggt 420  
ttaagttgct actattcaac tacactatat ataaataaaa tatatacaat atatacattg 480  
ttttcactgt atcacattaa agtacttggg cttcagaagt aagagccaac caactgaaaa 540  
cctgagatgg agatatgttc aaagaatgag atacaatttt ttagttttca gtttaagtaa 600  
ctctcagcat tacaaaagga gtaagtatct cacaatagg aaataaaaac taaaaaccgt 660  
agatttaaaa aagaacctgc acggggcctt anggtaaatg ctcaatctta aacccccact 720  
aanaggggaa agtcctcccc aagtttcaag caaaggacca atttacttaa aggtgaagtt 780  
ttgggaaagt tataaagggg gtanggtttt tangcccatn aggattttta nttttaaatt 840  
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<210> 4100

<211> 624

<212> DNA

<213> Homo sapiens

<400> 4100

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 aagcagatgg actgagcaca aaccactggc tgatcgggac agacaagtgt gtggagagga 180  
 tcaatgagat ggtgaacagg gccaaacgga aagcaggggt ggatcctctg gtaccgctgc 240  
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 tnatgggtga tgagggttca gcctactgga tcgcacacca agcagtana atagtgtttg 540  
 actccattga caacctaaaa gcggctcctc atgatatcgg ctacgtcata cangccatgn 600  
 tccactattt cntgtgcc natc 624

<210> 4101

<211> 732

<212> DNA

<213> Homo sapiens

<400> 4101

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 gatatgctgc cttctccgga gcagactctt tctcccttaa gtaaaatgcc tcactctgtt 180  
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 aatctgaaga ctttgaaaac ttttggtgcc ccacgaccat actcaagttc tggTccttca 360  
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 cctagtGCCa gtgcattggT ccaacctcca gccaanacag aggaaggga gactcattct 480  
 gtaaataaat ttgtggacat cccacagctt ggtgtgtctg ataaggaaaa taactctgca 540

cataatgaac agaattccca aataccaact ccaactgatg gcccatcatt cactgttatg 600  
 agacaaagtt ctttancatt ccaaaaagct ctgaccagn ncaagtnca cagagttttg 660  
 ctgactgcaa tccgttcggg agaaggtgct gccaaatttg gaaaaggggt taccattcca 720  
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<210> 4102

<211> 801

<212> DNA

<213> Homo sapiens

<400> 4102

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 ttacagataa cttttcaaaa attcatcatt cacccttgat ttaattattt ctctggcaat 180  
 tatttaatag acttctcgga gtctgttaag tacttaaacc aagaactacc attattccta 240  
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 aatagaagca agtttaaga gctatatitt taaacatgga acaanctccc atgggagcca 660  
 tgccagtggg agtgggaaaa gtagtacatg ggggagatgg ggggagnttt tttggaaaaa 720  
 ccaggatttc aggttcccaa tttcactact ttccaagttg gtanaccctt tggggaaagg 780  
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<210> 4103

<211> 598

<212> DNA

<213> Homo sapiens

<400> 4103

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tttggaagcc tgggcggcgt ggagacggcg ccttcagctt gagataaatg tggccccgtc  180
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<210> 4104

<211> 693

<212> DNA

<213> Homo sapiens

<400> 4104

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catctctctc tccagtttca cccacccac cttttgcttt catttcaggt gtgttggtct  180
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tgcccttggt ggaagcccca ggggtggacac tcaagcacga aggtctctcc ctttaactgt  480
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tctcctcac cgccaccttc cctgccccaa gcccccaagca gccatgggta catgggtccc 600  
canctcanct anggggtccc gncaagtctg cccagctgca agtactcang ccccatgggg 660  
gggattcttg ggtccggttt ttcttggtgg gaa 693

<210> 4105

<211> 604

<212> DNA

<213> Homo sapiens

<400> 4105

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tttcttagta aactcctgaa aaagtaggaa aggtggaaag tatatatcat tttataaat 180  
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ctgaaagaac ttgatttgaa ttacgtttag acaaaaatga ttttaantgta aattccctaa 540  
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<210> 4106

<211> 622

<212> DNA

<213> Homo sapiens

<400> 4106

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 aaaaaattaa aaatgtataa gtgcaatagc tatatgatgt tttattttct aatttatatt 540  
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<210> 4107

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4107

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 ctaacattaa gttcatgggc aacatcactc taactcatac ctgaaccaag cttatctaatt 180  
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 ttttttatga agctacacta agatnaagtt gtantcctan gaagtggata ccataattat 720

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771

<210> 4108

<211> 661

<212> DNA

<213> Homo sapiens

<400> 4108

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tgattttatt ttaatgaagt gttatacaat caagaaatgg gggcaagggc ctgcccccca 180  
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aagcttccta acctcttaag catcatggaa ccagtcagcc ctctgtggag tcattgtgct 360  
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attgaggccc angaagaggc cctggtttgg ggctgtgcca agctcaganc cctttgacca 600  
agaaccaact gctcanggtc acaaaaagt ggcaaaaatt gcnggnctgg ggcaagganc 660  
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<210> 4109

<211> 641

<212> DNA

<213> Homo sapiens

<400> 4109

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aagatgcaca caagccaaga tttcaggcaa acaatgagca agaaatatcc cttcatcttg 180  
 gaagttttatt acaaatccac tgagaagtct ggaatgtatg gaatcagaga gctagatcaa 240  
 aaaacatggt tgaacagcaa aaattagatc cagtcatcac gttcagcctc ccatctaagc 300  
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 aaagatgaat gtttcaaaaa gaaatgacta aggaaggaaa agaaacaaat gctctaaaga 540  
 ttttctctcc ccaagcactt ttactgggtga aataaaaacc agtnacaatc antatgtaaa 600  
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<210> 4110

<211> 749

<212> DNA

<213> Homo sapiens

<400> 4110

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 ggctctggtg ctggagaagg atacgagcca atcagtgatg acgaactaga tgaaattctg 180  
 gcaggtgatg cagaaaagag ggaggaccaa caggatgagg agaagatgcc agatccctta 240  
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 aaaaagttgg caggttctga actctttgcc aaagtcaaag aaacatgtca gagactttta 420  
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 gcgttgtgct tcagacggga ttctgcaatt cgaaagcagc ttgttaaaaa ttgagaangg 600  
 caccataaaa caagcttaca cgaagtgtc caatgggtag acaatgaatt acttcgattg 660  
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<210> 4111

<211> 802

<212> DNA

<213> Homo sapiens

<400> 4111

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gacccgcatt ttatccttga tgttccccctt ggagtgatca gcagagtgga gaagattgga  180
gcacagagcc atggagacaa ttcctgtggt atagagatag cgtgcaagga tatgaggaac  240
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aaaatacttg caaaacaata aatggatgcc aacgcacagt cacacaagcc ttatcctcct  720
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<210> 4112

<211> 629

<212> DNA

<213> Homo sapiens

<400> 4112

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 ttattcaagt ctgcagccgg ctcccaggga gatctcggtg gaacttcaga aacgctgggc 240  
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 cgcccaggaa ctacgctac tgcactccaa atacgggctt catgtgagcc cggcttacga 540  
 gggccgcgtg gancaaccgc cgccccacg caanccctg gacggctcan tgctcctgcg 600  
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<210> 4113

<211> 714

<212> DNA

<213> Homo sapiens

<400> 4113

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 atatatatag acacactgtc tttaaactta ggcctgtatc cgggtgtccga ggcgaactca 180  
 gtaagatgat gttaagagga aacctgaagc aagtgcgcat tgagtaaaac ccggcccggc 240  
 ttcgcgccct ggagtcgcg gtgggcgaga gcgagccggc ggccgcggca gccatggcgc 300  
 tcgctcttgc cggggagccg gcaccgcccg cgcccgccg tccagaggac caccggaacg 360  
 aggagatggg gttcactatc gacatcaaga gtttctcaa gccgggcgag aagacgtaca 420  
 cgcagcgtg ccgcctcttc gtgggaaatc tgcccaccga catcacggag gaggacttca 480  
 agaggctctt cgaacgctat ggcgaacca gcgaantctt catcaaccgg gaccgtggct 540  
 tcggcttcat ccgcttggaa tccagaacct gggctgaaat tgcaaaaagg caaacctggg 600  
 ncggcaccat tctcaagagc anacctctac nggattcgct ttcgctncac attggagcaa 660  
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<210> 4114

<211> 769

<212> DNA

<213> Homo sapiens

<400> 4114

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cgggacgggg tagtgagcgc gtcacttcct gccgctgcca ggcgcgctcct cccgcgcgct  180
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caaagggaaa cctgggaaga agcagctctt cacctgaaaa atgttcactt tgcctcagtt  420
gtgaattctt tcattgagaa ggagaattac cattatgtta ctatattaat gaaaggagaa  480
gtggatgtga ctcattgattc agaaccaaaag aatgtagagc ctgaaaaaaaa tgaaagttag  540
gagtgggttc cttgggaaga actacctccc ctggaccagc ttttctgggg actgcgttgt  600
ttaaaagaac aaggctatga tccatttaaa gaagatctga accatctggt ggataacaan  660
ggaaatcatc tctangtggg ccganaagat ttgattttc tttaaaaaga caagaaataa  720
ggtcctgggt tangggaatt gaaaaaatgt ntacatttcg gnacaaact                769
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<210> 4115

<211> 602

<212> DNA

<213> Homo sapiens

<400> 4115

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tggcagaagt gctgctcctg ctctgctcc ttctgctggt ggggggaaga gtgatcaggg 180  
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 tcttgagggc ccccttgtaa aacctgcctc agcctctcct ttgcaaagcc agaaacagga 360  
 aagagggtg ggggtcccccac ctctggatgg tgctgaggtc tccaggctcc tggagtgcct 420  
 catgctggct aagtctctc tgggtcctc caggggttct gtgtgctctt ggaggtccct 480  
 ctgctagtgg tggctaacta gagagtcagc aggggggtga ctgggaaaga gggagagggtg 540  
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 ca 602

<210> 4116

<211> 794

<212> DNA

<213> Homo sapiens

<400> 4116

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 tggaaggtga gcatctggta aaggaacagc tggatgta agagagtaaa aatctgggga 180  
 agaaagatag atcagctgtg tcagctgctt ctatttggtg gagtacaatg aggcctgggtg 240  
 actgcagaag tcaagggcag ctccctgga ggggtcttg agagaatggg aggaggtaac 300  
 ttgaaaacaa ctagtttaga gcattttctt gagcggttg gctaattagg agagcataga 360  
 aatgggacag taactgaaag aaaggatatt ggggatcaag caggggtttt ttgaaacata 420  
 gaagttagaa tttttttgta tatagaatgt ttgatctcac taaagagaaa gatcaaatga 480  
 aaaggaggaa tttggcatga cggaggaagg aggagaattg cttgtctgct atatccaagg 540  
 cccctgaaaa aggatgggat ccagtgcag agtggttggg catgcacttc taggagcaag 600  
 ggaaggcana gggaggagaa taaacctta aacangtcac accaaaccgg tagtggncaa 660  
 taagtgcact ctctctcac tgttgatact ggagatttan aatttttaac acaatttttt 720  
 aaaccnctac acatttgata ggtttgccta aattttacct ttcattacta cnganaataa 780



actttttcan atta

794

<210> 4117

<211> 731

<212> DNA

<213> Homo sapiens

<400> 4117

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 aagtgccttct ttagctatga tgaatgacta gtttttaatt acgaatctgt cacaacctag 180  
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 agtaccactg tactagaaca tatttaccat tttatagtca gcagttaaaa tgtgaaagct 420  
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 acattatgat ggctgaattc ctgcaggatt attaacttac aaaaagggtt ttttagtaat 540  
 accaggaaaa ttgataagt accaattcta tgcagagata agtctttttc agtggactca 600  
 attaaaacat cataatcctc attttaagtc tgtcatttaa ttgagggtt gnttttaata 660  
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<210> 4118

<211> 708

<212> DNA

<213> Homo sapiens

<400> 4118

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 tgtgatcctc ccgcctcggn ctcccaaaag tgctgggatt acaggcgtga gccactgtgc 600  
 caggtccaag ttanttantt atttattgta nagatgggct ctcaactgtgt tggncagggg 660  
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<210> 4119

<211> 670

<212> DNA

<213> Homo sapiens

<400> 4119

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 aatgtattgc tgttgaggga catctcgatn caaagaacag ccgttcctgt gcgggccttc 540  
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caaaacntgc

670

<210> 4120

<211> 751

<212> DNA

<213> Homo sapiens

<400> 4120

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 aaatacatgt ttgaaatct gttctcccat tttgttgctt tttgctatc agtaatgtcc 180  
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 aaccaagcct accaccaca caccactaa ctccatgcc ttatccgctg tcccatcacc 420  
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 gaagtcacct aggttttgtc ttcacagtag acacatctct acaagtgcatt ttactgaacg 540  
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<210> 4121

<211> 567

<212> DNA

<213> Homo sapiens

<400> 4121

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 gctggancaa cttcctggaa aaaangattt attcattgag gcagatctca tgagcccttt 480  
 ggatcnaaat tgccaatgtc tccaacctga aagcancacg aagtagacaa gctatacaag 540  
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<210> 4122

<211> 820

<212> DNA

<213> Homo sapiens

<400> 4122

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 aataccttat atattccaaa ttttattctc tataatggac ttttaaaata aaaggtatat 180  
 gtgcttcaag agggcaaaat ttgaatcatg agctaatttg ctaagcatca gattatagaa 240  
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 ctaggataat attccttgct ctctgacaag acaaattacc tgtaatgagt gcagtaactg 720  
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natttagcaa aaatgaaacc ccggagtaac gtngaaaaat

820

<210> 4123

<211> 514

<212> DNA

<213> Homo sapiens

<400> 4123

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<210> 4124

<211> 780

<212> DNA

<213> Homo sapiens

<400> 4124

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 gtgtgttgag cagctctgaa ctgattttac ttttaaagaa tttgctcatg gacctgtcat 660  
 cccttttata aaaaggctca ctgacaaaga ggacaagctg ttaatttccc acagcaatca 720  
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<210> 4125

<211> 679

<212> DNA

<213> Homo sapiens

<400> 4125

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 ggtgctgctt ggccccaggt cgaattcctg tgctggcagc aagcaggggc ctgggccgtc 420  
 ggctggctgg ggctcatgca gccatcccct ttgcagccat ccgggtgacc tgcataggtt 480  
 cctgcgggggt ctccaacaag gctaatagaca cagcgtgggt agtggangga gggttacttc 540  
 aacagttccc tgtcncctggc aaacaagggg agcctgccgc tggaggagca caagcttccc 600  
 cttccaagtt cctgcttcct gncactngca cccacgtcct ttgagggtcc tttcggggaa 660  
 gatcntgcaa caanntgaa 679

<210> 4126

<211> 728

<212> DNA

<213> Homo sapiens

<400> 4126

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tcgcagttca aacctggtat gccatcaaga aaattcatac aggagaaaag ccttacaaat   60
gtaatcaatg tggcaaggtc tttaatcaag catcatacct tacaagacat caaataattc  120
atactggaga gaggccttac agatgtagta aatgtggcaa agcatttcga ggggtgttcag  180
gccttactgc ccatcttgca atccatactg aaaagaaatc tcatgagtgt aaagaatgtg  240
gcaagatctt cactcagaag tcttcctca ccaatcacca tagaattcac attggagaga  300
aaccttacia atgcaccctg tgcagtaagg tcttcagtca caattctgac cttgcacagc  360
atcagagagt tcattcatga gagtcctac aaactgtgta tggcaaaacc atcatcatga  420
gttctagcat taatcaacat cagtgagtc atactaagtg gaaatcatat aaatgaaatg  480
tatgtgacac aggctttatc aaggcctgcc aaatcactgg gacatcacca catcactgtg  540
gaggatgaaa gcacacagat gaattgtgtg tacttgggct attattcaag ggccattgct  600
atagaacacg atagggattt acacaagaag taactctgtc tctgggtctc tgataactaat  660
ctatgatatt gcatgatgca agataanggc taagtcaaaa tangttgaat ccccatgacc  720
cngatggt                                         728
    
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<210> 4127

<211> 643

<212> DNA

<213> Homo sapiens

<400> 4127

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attacaaagg ttgcttaact tctaattatt tgatcactga ggaaaatcca gaaagctaca   60
caacactgaa ggggtgaaat aaaagtccag cgatccagcg aaagaaaaga gaagtgcacag  120
aaacaacttt acctggactg aagataaaaag cacagacaag agaacaatgc cctggacatg  180
gtccagaga tccacatgac aggcccaatg tgcctcattg agaacactaa tggggaactg  240
    
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gtggcgaatc cagaagctct gaaaatcctg tctgccatta cacagcctgt ggtgggtgg 300  
gcaattgtgg gcctctaccg cacaggaaaa tcttacctga tgaacaagct agctgggaag 360  
aataagggtc tctctctggg ctccacagtg aaatctcaca ccaaaggaat ctggatgtgg 420  
tgtgtgcctc accccaaaaa gncagnacac acctagncc tgcttgacac tgagggcctg 480  
ggagatgtaa agaagggtga canccagant gactcctgga tcttcacctt ggccgtcctc 540  
ctgaagcagc actctcgtgt acaatagcat gggaaccatc aaccagcagg ctatggacca 600  
actgtnatat ccttttgn gn cccanggaca gnaccaagg tca 643

<210> 4128

<211> 833

<212> DNA

<213> Homo sapiens

<400> 4128

tcaaaccttg tactactcag ctgatcaciaa gttgcttgat gggaacctac tagatggaca 60  
ggctgaggtg tttggcagtg atgatgacca cattcagttt gtgcagaaaa agccaccacg 120  
tgagaatggc cataagcaga taagtagcag ttcaactgga tgtctctctt ctccaaatgc 180  
tacagtacia agccctaagc atgagtggaa aatcggtgct tcagaaaaga cttcaaataa 240  
cacttacttg tgcctggctg tgctggatgg tatattctgt gtcatttttc ttcatgggag 300  
aaacagccca cagagctcac caacaagtac tccaaaacta agtaagagtt taagctttga 360  
gatgcaacia gatgagctaa tcgaaaagcc catgtctcct atgcagtacg cacgatctgg 420  
tctgggaaca gcagagatga atggcaact catagctgca ggtggctata acagagagga 480  
atgtcttcga acagtcgaat gctataatcc acatacagat cactggctct tctttgctcc 540  
catgagaaca ccaagagccc gatttcaa at ggctgtactc atgggccagc tctatgtggt 600  
aagtggatca aatggccact cagatgacct gagttgtgga gagatgtatg attcaaacat 660  
agatgactgg attcctgttc cagaattgag aactaaccgt tgtatgcang agtgtgtgct 720  
cctgaatggg gaaggttata catccgttgg tggctccgga tccatatggg ncaaaaaagg 780  
gcctggaaaa aattggtgan ggtatttggc cctnggnaac aaaagtntt ggg 833



<210> 4129

<211> 633

<212> DNA

<213> Homo sapiens

<400> 4129

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gatgagcacc taggaggact ttcctcatgt ttgccttttc acacacatgc aaatgtttca   60
ttgaaaatct tctgaaagcc gcaatcttgc cagaatcccc agtaatgagc ttcgttctta  120
gtatactaag aatttagttt atgtgaactt agaaactatt gcactcccc cacaagtaaa  180
aagctgtaag atcatttctg aaataattaa aataactcaa atttaagcaa gatgataaaa  240
acatacatga aaacttaaaa atataaatgt aaatgataaa atttttcatt tgtgtgaagc  300
actgcaaaaa attttcccaa aaaaagctgt gcgaaaaaac acgtagtagt aataggaacc  360
caaaaaactt aatcaccttt ccagatacca gagcaaaatc ataaaggaac ctgccccata  420
gactgtcacc caaatgggtgc gtgctactgc cagaatggac ctagccatt ggttccttca  480
ntctggcttt gcagaggaag tttcatgtca gatactgagc ccaagctgca gctaccccag  540
cagagcctca nnggcctttcc cgcactgtct tgggaaacat gggcgtactt tgaggtctcc  600
tgcaancgtg ttgtttgggg tcccccaaat gnn                                633

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<210> 4130

<211> 739

<212> DNA

<213> Homo sapiens

<400> 4130

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gcttccatga ctaacttggg caagatgggc tttccttcta aaacagacag ccctagctgt   60
gaatattctc ggtttgattt igatagcgat gaggacttca atgctttctt caactcctcc  120
cgagcacaac aaggagaggt gatgaggttg gcatgtcggt tggatcccaa aactagcttc  180
cagatggctg gggagtggct aaagtatcaa ctatcaactt ttcttgatgc tggttctgtg  240
aattcttggt ctgcagttgg aactggagaa ggaagcctct gttccgtctt ctcaccttca  300

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ttcgtgcagt gggaagccat gactcttttt ttggaaagtg ttatcaccca gatgtttcga 360  
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 aactttgata ccaaggatcc cctcatcctg tcctgcgtcc ttactaaagt ctctgcactc 480  
 ttccatttg tcacctacag accaagaagt tcctgccccca agtcttctct aagctatattt 540  
 catctggcac ttttгнаact gttgaagaaa gtaaggncct caagaaccg gccagtgagg 600  
 aatgtgagga ggcatgcttg ttccctccaac atcaaagatg tgcgtgact accccaagct 660  
 tgtgctgcc aattttgaca tgcttttata accatgtgaa ngcaaactcn tctccaattg 720  
 agctaactcc ctgnnanaa 739

<210> 4131

<211> 695

<212> DNA

<213> Homo sapiens

<400> 4131

cggcccaggc catggctatg atggggagga gagagcgggtg agtgatagct tcgggccttg 60  
 agagtgggat gaccggaaag tgcgacacac ttttatccga aaggtttact ccatcatctc 120  
 cgtgcagctg ctcatcactg tggccatcat tgctatcttc accittgtgg aacctgtcag 180  
 cgcctttgtg aggagaaatg tggctgtcta ctacgtgtcc tatgctgtct tcgttgtcac 240  
 ctacctgac cttgcctgct gccagggacc cagacgccgt ttcccatgga acatcattct 300  
 gctgaccctt tttacttttg ccatgggctt catgacgggc accatttcca gtatgtacca 360  
 aaccaaagcc gtcattcattg caatgatcat cactgcgggtg gtatccattt caagtcacca 420  
 tcttctgctt tcagaccaag gtggacttca cctcgtgcac aggccctctc tgtgtcctgg 480  
 gaattgtgct cctgggtgact gggattgtca ctagcattgt gctctacttc caatacgttt 540  
 actggctcca catgctctat gctgctctgg gggccatttg gttcaccctg ttccctgggtt 600  
 acgacacaca agctggncct ggggaaccgg aatcacaaca tcagcccngn ngactacatc 660  
 actggggggc ctgcangatt tacacagaca tcac 695

<210> 4132

<211> 772

<212> DNA

<213> Homo sapiens

<400> 4132

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acagagcctt tcaattcaag cttgggggtga gctgcacttc aggcattgggg atataatagt   60
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agccccctctc attgctcttt agaagtaatt taaatttttc tgctacattg tctgctcagc   180
tcgtattctg gtcataagagg aacctgaagc cagagaaact agacaaaaag gaacctcttt   240
caggagctat aaaagaaagg gaggaatcat gtccacaatt gcagctttct atggcggcaa   300
gtccattctc atcacggggg ccacaggctt tctgggcaaa gtgctaattg agaaactggt   360
tcgcaccagc ccagacctga aagtcattta catccttggt aggcccaagg ctggccagac   420
actgcancag agggttttcc agatcctaga cagtaagcta tttgagaaag tcaaagaagt   480
ttgtccaaat gtgcatgatg aagatcagag ctatttatgc agntccaatc aggaatgact   540
ttgccatcag caaanaggac atgcangagc ttctcncctg tanaaacata atatttcact   600
gtgcagccac tgtacgcctt tgaccgacac tctcaagaca tgcctgtgca aacttaacgt   660
cactgccaac cggnagctc cttgcttaag gctactcaga ttccaaagct ggnaagcctt   720
ttatacatat cnccactgcc tattcaaatt gtaaccttga nagccacatc gn           772

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<210> 4133

<211> 783

<212> DNA

<213> Homo sapiens

<400> 4133

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acatggattt aggtgctatt acaaaatact cagcattaca cgccaagccc aatggactga   120
tccttcaata cgggactgct ggatttcgaa cgaaggcaga acatcttgat catgtcatgt   180
ttcgcattgg attattagct gtcctgaggt caaacagac aaaatccact ataggagtca   240

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tggtaacagc gtcccacaat cctgaggaag acaatgggtgt aaaattgggtt gatcctttgg 300  
 gtgaaatggt ggcaccatcc tgggaggaac atgccacctg tttagcaaata gctgaggaac 360  
 aagatatgca gagagtgcctt attgacatca gcgagaaaga agctgtgaat ctgcaacaag 420  
 atgcctttgt aattattggt agagatacca ggcccagcag tgagaaactt tcacaatctg 480  
 taatagatgg tgtgactggt ctaggagggtc aattccatga ttatggcttg ttaacaacac 540  
 cccagctgca ctacatgggtg tattgtcnaa acacgggtgg ccgatatgga aaggcaacta 600  
 tagaagggtg ctaccagaaa ctctctaagg cttttgtggg actcaccaaa cangcttctt 660  
 gcaatggnga tgatacagat cacttaagggt ttgactgtgc aaatggcata agggncctga 720  
 anctaaggga aattggacac tacttctcan aagggcctgt caantttaaa ncggtttaag 780  
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<210> 4134

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4134

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 cgcgtcatca acaacctcct ctactaccaa accaactacc ttctctgctt cggcatcggc 180  
 ctcgctctcg ccgggtacgt gcggccactt catacgtcc tgagcgcgct ggtagtggcg 240  
 gtggccctcg gcgtgctggt gtgggcagct gagaccgcg cagctgtgcg ccgctgccgc 300  
 cgcagccacc ctgcagcctg cctggccgca gtgcttgccg tcggcctcct gatgctctgg 360  
 gtcgcgggcg gcgcttgac cttcctgttc agcatcgccg ggccggtgct tctgatcctg 420  
 gtgcacgcct cgttgcgctt gcgcaacctt aagaacaaga ttgangaaca agatcgagag 480  
 cattggtctc aagcggacgc caatgggcct gctactanag gcactgggac aagagcanga 540  
 ggctggatcc taggcccctg gggatctgta cccaaggacc tggagaatac accccacccc 600  
 cagcccataa ttgggaaccc agaagccctt tcccancact taaaacagga gcctanagcc 660  
 ccctgcccac acaaaacagg acatctgtga cgtcctaccc nangccatcc ccaaactaa 720

gatatccctc aaaaccagcc cccaattacc tanggggaca agnagtcctt ccccaa 776

<210> 4135

<211> 689

<212> DNA

<213> Homo sapiens

<400> 4135

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caciaaacaag aacagttgaa acttttctgt gaaacatgtg atagattgac atgtagagac 120  
tgtcagctat tggaacacaa agaacatagg tatcagtttt tggaagaagc ttttcaaaat 180  
cagaagggtg caattgagaa tctactggcg aaacttcttg agaagaagaa ttatgttcat 240  
tttgagcta ctcaggtgca gaataggata aaagaagtaa atgagactaa caaacgagta 300  
gaacaggaaa tttaaagtggc cattttcacc cttatcaatg aaattaataa gaaaggaaaa 360  
tctctcttac aacagctaga gaatgttaca aaggaaagac agatgaagtt actacagcag 420  
cagaatgaca tcacaggcct tccccggcag gtgaagcatg ttatgaactt caciaattgg 480  
gcaattgcaa gtggcagcag cacagcacta ctatacagca agcgactgat tactttccag 540  
ttgcgtcata ttttgaaagc acggtgtgat cctgccccctg ctgctaattgg gagcaatacg 600  
tttccantgt gatcccacct tccggggcaa angatgtagt ccaatttang gtaatcctag 660  
taatangnga gtaaaccagc tcctgggta 689

<210> 4136

<211> 664

<212> DNA

<213> Homo sapiens

<400> 4136

cgcatgcgca gaaacactgg gcacaggggg aggttaactgc agtaagtccc gcttggccct 60  
ggagtccacg cggatttttcg aagctggggc tggcaagagg ccgctggaca ccacgtcca 120

gtcgtcagcc cacttcctag ctgaacagcg cgaggcggcg gcagcgagcc ggggtcccacc 180  
 atggccgcga attattccag taccagtacc cggagagAAC atgtcaaagt taaaaccagc 240  
 tcccagccag gcttcctgga acggctgagc gagacctcgg gtgggatgtt tgtggggctc 300  
 atggccttcc tgctctcctt ctacctaatt ttcaccaatg agggccgcgc attgaagacg 360  
 gcaacctcat tggctgaggg gctctcgctt gtgggtgtctc ccgacagcat ccacagtgtg 420  
 gctccggaga atgaaggaag gctgggtgcac atcattggcg ccttacggac atccaagctt 480  
 ttgtctgntc caaactatgg ggtccatctt ccggctgtga aactgcggag gcacnntgga 540  
 gatgttccaa tggggtaaaa actgagggag tccaggggag tacaccgagg aatgggcang 600  
 tgaangaaag gagacnaggt aattccctac aacaacttga attggaggtc anaaaatcat 660  
 ncaa 664

<210> 4137

<211> 724

<212> DNA

<213> Homo sapiens

<400> 4137

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 tccatggact ggggaatgaa actgttccac ctcagatcac cgggcattag attctcataa 180  
 gaagcatgca acctagatcc ctgcgatgca cagttcaca cagggttcaa gctcctatga 240  
 gaatctaata cactgctga tctgacagga ggcgagctc aggcagtaat gctggctgaa 300  
 ctgctgctca cctcctgatg tgaagcctgg ttcctaacag gccacggatg ggtgccggtc 360  
 catgatccgg gggatgggga cccctgaata ttggctagct attgccctga gccctcccta 420  
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 anctaaaggg tcccangacc ctccctccatc actatgacat gcacccatcc cttctgaa 540  
 ggtcaagtgc ccagctgcac tantttgtta aatattttga atctcaactc cgggtgcaag 600  
 ggagtcctgg gctccatgaa gaaaagttag tggggtaaac ttgggggcaa ctttgcctaa 660  
 actgctctga cctttcccat tcccaanac cctgcattgg angggttgtg attgggaant 720

tgnn

724

<210> 4138

<211> 667

<212> DNA

<213> Homo sapiens

<400> 4138

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gttttgcagt ctttcacttt aaaaactcaa aatggaaaat tatatacttt attttaatat 60
ttacaaatat ttacaaatat ttatttttaa ataaaatgta tataccatgt agtatgttgt 120
atttatttac tcaatgttct ttttaagtgtt tcaggctgca tgtaccaagt agttcagacg 180
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ccagttcaag ttacttttca gactcagatt tccagctctt ccacaagtgc atcagttcaa 360
ttgcccattt ttcagccagc cagttcttca aactattttc ttacaagaac agtagatata 420
tcagaaaaag atccataatg agatggcatc aacatcagat aaaggtgccc aaggnagaaa 480
tgacaagata gattctcaag gaagaagtaa taaggcatta catctgaaga gtgatgctga 540
atttaaaaag atatttggcc ttactaagga tttgagagng tgccttactc gaattcctga 600
ccatttggac ctctggagaa ggtttccgnt tccttttagca agtttggnaa agagtgggac 660
ttncaan 667
    
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<210> 4139

<211> 814

<212> DNA

<213> Homo sapiens

<400> 4139

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gaatgaaggc ccatgtagca aaatactgat tcaatgtaaa gcaaactttg aaaataagct 60
aatagtcctt aaagaaaaac ttatttcaga tagcaaaaaga caagccaatg aactcattag 120
    
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ttttaaaaac caaagtcaag aaaggctgaa taagaaaaag acagattatg aaaaagaatt 180  
 attggaaaaa agccggaagt tggctttaac tgtaaagggc aaagaattga gtgaggaaga 240  
 gttacatgag aaattcaatc aactttggaa aaagtgggtg tgtgatgtat ccacaactct 300  
 cccgcaagtt acagagcctg acattgattt ggattctgaa aacatccttt gggagtattt 360  
 caaaaacaag acgaatgtcg tgggtctact gacaaattct gcagagaagt ttcaaatcaa 420  
 ttatgataaa catatcaagg tgaataagaa atataaccat atcccaatga cattaacagt 480  
 ctttgagaaa gagttcatta atatgactac tgactacatt gtttcaagat ttaataaaaat 540  
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 aaagacaata gaagaaagaa gtgaaatctg cctctactca gaagagatac acatttacia 660  
 atacatttat cantgactta ngtgtgtgtt taattcaaag gagcaagaga gaaatttaag 720  
 ggaatgcaca agggcaatca agagagcaaa tggatcccgg taaactacct agaaaagtta 780  
 gnaaagtgn nttcctcaac naggttttaa natt 814

<210> 4140

<211> 677

<212> DNA

<213> Homo sapiens

<400> 4140

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 cctttcatat atgagaagca aaaaggctcag caactgtaat ctgtatcgcc ttggaaaaaa 120  
 gaagggaacta cccagccgca tgggtgtgtc aatatttgat cccctgtga attggcttcc 180  
 tcctggttat gtagtaaatc aagacaaaag caacacagat aaatgggaaa aagatgaaat 240  
 gacaaaagac tgcattgctg cgaatggcaa actggatgag gattacgagg aggaggatga 300  
 ggaggaggag agcctgatgt ggagggtccc gaaggaagag gctgactatg aagatgattt 360  
 cctggagtat gatcaggaac atatcagatt tatagatagt atgttaatgg ggtcaggagc 420  
 ttttgtaaag aaaatctctc ttctccttt ttcaaccact gattctgcat atgaatggaa 480  
 aatgccc aaaatcctcct taggtagtat gccattttca tcaagatttt gaggattttg 540  
 actacagctc ttgggatgca atgtgctatc tggattctag caaagctgtt gaagaagatg 600



actttgtggt ggggttctgg aatccatcan nagaanaaact gtggngttga caccgggaaa 660  
agnantccaa tttctta 677

<210> 4141

<211> 765

<212> DNA

<213> Homo sapiens

<400> 4141

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agttctgcgt ccacagctta taagaattga tggccggaat tacaggaaga atccagtcca 180  
agaacagacc tatcaacatg aagaagatga agaggacttc tatcaaggct ccatggagtg 240  
tgctgatgag ccctgtgatg cctacgaggt ggagcagacc ccacaaggat tccgggtctac 300  
tttgagggcc cccagcttgc tctataagca tatagttgga aagagagggg aacttaggaa 360  
gaaaatagaa atggagacca aaacttctat tagcattcct aaacctggac aagacgggga 420  
aattgtaatc actggccagc atcgaaatgg tgtaatttca gcccgaacac ggattgatgt 480  
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tgaagttgag gttcaggaag gattcctgag attccaggag gaagtactgg cgaagtgtc 600  
catggatcat ggggttgaca gcagcatttt ccaagaatcc taaaagctt catctaaact 660  
attggggaat gtttgggtgc cntttgagtt gaaggaagag attccagcag gncnatgtta 720  
agnatgctac aagcaagtgt taaaagaggg aattcattaa ntgga 765

<210> 4142

<211> 663

<212> DNA

<213> Homo sapiens

<400> 4142

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aagtagtaaa cagttcataat tttgatttcc cctcatttta gttaaataata atttgcaata 120  
aatgtacata ttgttggttg tttcataaag catatcactt taaaatgggtt tttactcctg 180  
tgattatggtt ggaatatattg gaattttgaa ggagtaaaga ctgtccagca tttggtttta 240  
taatgtttgt caccagattt ttattaatgt aaaaaaaatc aattttttaa aaatagttgg 300  
actttggcag cttttaagga aagttggagg tgttttagga ttgctatcaa ttttcagcat 360  
tgtgctatatt ggaaataagt gttttgcttt tgtctgatgg tctgggctca tttttatggt 420  
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tgtgtgcact ttatgtgtac acataatcat atttaagttt tttgcataaa ataatgctt 540  
ctagatgtca tggcagtcctt tttaatctct ttaacatatg ctttcntgtg aattttttca 600  
tgtaaagag ctnaangtca taacatggat tacagtcaac tctccattan tctatatnaa 660  
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<210> 4143

<211> 625

<212> DNA

<213> Homo sapiens

<400> 4143

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cgtgctgacc aaagagtgcc gcaagaaggc caagccgcgc atcctcttcc tctttaacga 240  
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ccccctggag gaggtcacac tggagctgtt gccggagacg ctgcaggcca agaaccgctg 360  
gatgatcaag acggccaana agtcctttgt ggtgtcggcc gcctccgcta cggagcgcca 420  
ngaattggatt agccacatcg aggagtgcgt gcggcggcaa ctgagggcca cgggccgccc 480  
gcccagcacg gngcacncgg gaccctggnt ccccgacaag gccacggaca tctgcatgcg 540  
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gggttttcnt ggtctgcgct gaann

625

<210> 4144

<211> 791

<212> DNA

<213> Homo sapiens

<400> 4144

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 taagttttaa acagaaggtg aacctctgag atagaaaatc aagtatattt taaaagaagg 180  
 gatgtgggat caaggaggac agccttggca gcagtggccc ttgaaccagc aacaatggat 240  
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 gatgccaaat ggacaagata tgtctacaat ggaatctggt ccaaacaatc atgggaattt 420  
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 cccacacccc cctccagatc agccatggat gccaccaaca ccaggcccaa tggacattgt 540  
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 ccaagtgaac caagtttgac tatcaagcat gggggctgct tttggnccaa cgcaaggtgg 720  
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 aagaatncna a 791

<210> 4145

<211> 815

<212> DNA

<213> Homo sapiens

<400> 4145

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 tgtagtttt ttagttaatt tcagctgggt ggtagtctat agtcccagct actcgagagg 180  
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 aaatccatgt ccaagcaagg ggagccacgt tttctaagct cacagtttaa aggttaaaga 420  
 gacacactga ggaaaactca gggaaagaag ctgatttgca tggacactag gcctgtcgtt 480  
 gattccctca tttcaaaagt tgcattgtcc atgggaggcg gagtctctga ggacatcctg 540  
 ggctgtgcct cgggtggctct ggactccagc tctacgcaga gcgccttaac actgtactgg 600  
 aagaaatggg aaatcgcat gaggacttac agaagaatgt caatgacttt aatggtgcaa 660  
 gctggcattg aaaattctat taaaggaaca aatgctgaag acctaactgc agcaatgtcc 720  
 ggtatttggg ngatggggcc tcctacagaa gtcattaang gttacatccg ggtcctgaan 780  
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<210> 4146

<211> 719

<212> DNA

<213> Homo sapiens

<400> 4146

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 ttggtatgta atatcagatt aagcagcagc taagtgaatg ctctgcatca caaagacctt 180  
 ttagtagcaa catgacttga aacactagcg ttgtatacca cagttttcta acacgaagga 240  
 gggattaaaa atgcaagctg gtaaaatgtt aatggttcta ttttgtccca cacaaattta 300  
 tacctttata aattttcccc tcgtgaggga aaaatcaaag atgtcagatt tcaaattttt 360  
 ttaaacaaaa ctccaactta taaattgggc ttttgaaaat gcatgatgaa acaaaaatac 420  
 cattccgtga ctgcacttag ttctagcagg tacttttata attagcattt aaaaaataca 480

tttgattca ttcaatctgc ttcagaaatt tgttatgtag tgcgaaaaac cactttcata 540  
 agcataagat aaactcttag aagttttttt tgaaggatgc ttttttatta agcattatgg 600  
 aactaatact gtattttaaga caggaacccc tgggccctaa caagttgatt tatgcttccg 660  
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<210> 4147

<211> 669

<212> DNA

<213> Homo sapiens

<400> 4147

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 tggctcaatt tggaggacag aagaatccgc catgggctac tcagtttaca gccactgcag 180  
 tatcacagcc agctgcactg ggtgttcaac agccatcact ccttgagca tctcctacca 240  
 tttatacaca gcaaactgca ttggcagcag caggccttac cacacaaact ccagcaaact 300  
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 cccagcaaac cctcttaaca cagccagctg ttgcactgcc tacaagcctt agcctgtcta 480  
 ctctcagcc aacagcacia ataactgtat catatccaac accaaggtcc agtcaacagc 540  
 aaaccagcc tcagaagcag cgtgttttca cagggggtgg gttacaaaac tacatggnta 600  
 catttgggat ttgtgggatg aagatgtatt ctttcagcgt angtgctgtc aaaggggaaa 660  
 accccccca 669

<210> 4148

<211> 814

<212> DNA

<213> Homo sapiens

<400> 4148

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gagggatttc atgggaagaa atcagaagca gctacagaga aacagaaatt agggatctct	180
cccattgctc cattttactg catgaaagaa gatgtccttg cttatgtgtt tgacagtgtg	240
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gatgacaagc tacttatgag gcctgggtcc agtaccatcc tttcaactcg aaattggcca	600
aatcgagctg tggagtttag tacatcatct ctgtcataca caagtncagt ccaccaggag	660
gacgcaatcc accaccacga aactcttcat ccgattangc acgangccat tcatgtgnct	720
ggaaacacca agatctgggtg gaaagaaatc ctcaagaggg agcccagatc ccaantggna	780
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<210> 4149

<211> 664

<212> DNA

<213> Homo sapiens

<400> 4149

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accacaacct gcacgagctg cgcgtgctgc ggcgttaccg gctgcagcgg cgggaggact	180
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tgcccgaacg cgaccagttc cgcgtgcgcg cttcggccgc gctgctggac aagctgtatg	300
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ccttctgccg ccgccgcctc cccaccgtgc tcctcaagct gcgcatggcg cagcaccttc	420

aggctgcagt ggcctttgtg gagcaagggc acgtacgcgt gggccctgac gtggttaccg 480  
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 agattaagcg gcacgtgcta aaagtacaat naggagcgcg atgacttcga tctggaaacc 600  
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<210> 4150

<211> 771

<212> DNA

<213> Homo sapiens

<400> 4150

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 tacaccaaaa cactccactt cactgggcag ttgcagcagg aaatgttaat gcagttgata 180  
 agcttttgga agctggttct agcctggata tccagaatgt taaggagaaa acacctcttg 240  
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 tgagagccaa ccaaaagttc agactttgga ggtggctgca gaaatgcgag ctcttcctgc 360  
 tgctgatgct ttctgtgatt accatgtggg ctattggata catattggac ttcaattcag 420  
 attcttggct tttaaaagga tgtcttctag taacactgtt ttttctgaca tctttgtttc 480  
 caaggttctt ggttgggtat aagaaccttg tatacttacc aacagccttt ctgctaagtt 540  
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 ctttctattt cagtttcatt ttcagcatag tagcctttct atactttttc tataaagact 660  
 tgggcaactg atccaagctt cactaagggc ttccgangaa agaaaagaaa gtgaatatca 720  
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<210> 4151

<211> 662

<212> DNA

<213> Homo sapiens

<400> 4151

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gtcccccaag agtgctctcc acttcagatg ccaactgcaa gccccaggtt gtggcctgtg 180  
cttccgacag agcagccata aatcagggtt cccatgactc tccttctcag tttctgttaa 240  
cttactagag gttctcacat aactcaggga gacacttaca ttaccact tattatgaag 300  
gacattataa aaaatacaga tgaacaacca gatggaaaag tgtatagatt aaagtatgga 360  
agaagggaca tggagctttc atgctctcac tggcacatta cttccaaga aactttcaca 420  
tgttcagcta cccagaagct gttccaaact ctgccttttt gagtttttat ggtggcttca 480  
ttgcataggc atgattgatt atatcattgg ncattgntga tggccaactc aatcttcagc 540  
ccctctccct tctccaaagg ttanggctga aaagtctcaa atcctctaaa ttatggctct 600  
ggggctttct gggaaccanc tcccatccct ggaanctatc ttangggttc caacaaccgt 660  
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<210> 4152

<211> 746

<212> DNA

<213> Homo sapiens

<400> 4152

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caagtcaagt ggttactctg gtaatggatt gcctctctcc gagctttcac cctgggtgaga 180  
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cccaagagtg aagtttgtat caccacagtc cctctgggtca gtgagattca gttgatggct 360  
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ttcatcgccg gcatcggtgt caccgcggtg gcttacagct tcaattccca tgggtctatt 480  
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cttgtgctgg aaagtgagac aaaggagcan gaaagccaag agacgggaga gtcaaacagc 600  
tctcgtggca aatcagagaa gcttgtctgc ttgagactga atacgaccaa atgggccatt 660  
gggcctggaa aacgtgctcn gaacttggca cccaattcac cangaaacca atggtgggag 720  
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<210> 4153

<211> 703

<212> DNA

<213> Homo sapiens

<400> 4153

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cagtgcatt gcacaatctg cctctgaagc tggagatact agctgcagag ctcaggggag 180  
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gtgcagaca ggccgtgccc cccattcctg agaggcctgg aagaagctcc tgccagctca 480  
naggagacct atcaggtgcc cactctacce cgccctccca ctccaggccc cgtttatgag 540  
cagatgagga gttgggcgga ggggcccagc cccctactgc ccaagtctat gaattccccg 600  
aacctccan cagtgccagn atcatctggt gaaaaagact ctcanctttc caaaaacaag 660  
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<210> 4154

<211> 720

<212> DNA

<213> Homo sapiens

<400> 4154

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ttattcagat gcatcactca taactttttg aactggctta aagtaatfff ttaaaatgtc 180
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catcttcgga cggttgattc ctactgaaga caaccctgtg gnataaaaaac tgggattcca 660
tcagatttca aatggttata cacaaatggn antttaatff tttggnccaa agcantgacc 720

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<210> 4155

<211> 685

<212> DNA

<213> Homo sapiens

<400> 4155

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agtgttttcc agtcaaagcg aagagacgat ctgtggatgt tgaatatgca aggagctgaa 180
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atccacaaag aagcaccccc tgaaattatt agtcaaggat ataattttga gaaaagcttg 480  
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 tgggaaacaa gtaatatata aaccaatgat atttcaaacc aaagtaaag tccaactctc 600  
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<210> 4156

<211> 740

<212> DNA

<213> Homo sapiens

<400> 4156

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 gcaaatgggt taaatgatgc ccaagtgtg gaagcggtgt gcgctatctt ttgagaaaat 660  
 ctgtttaagg ngctgctggg attaactttg ccccccatgg gggccacaag ctgtgtttta 720  
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<210> 4157

<211> 776

<212> DNA

<213> Homo sapiens

<400> 4157

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<210> 4158

<211> 667

<212> DNA

<213> Homo sapiens

<400> 4158

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<210> 4159

<211> 793

<212> DNA

<213> Homo sapiens

<400> 4159

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gttaaaatta agactgccct tttctgtaan gggaaaatat tttgaacctt aggggcttct 720  
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<210> 4160

<211> 755

<212> DNA

<213> Homo sapiens

<400> 4160

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tcctttgtca aagatcaagt tgaccatatt tatatggatc tatttctggg ctctctgttc   60
tgttgcaattg ctctctatct gttgtccttc ctttactgc taccatactg tctttgattc  120
ctatagcttt acagttagtc ttgaagtcac aaaagcatgg gatcccccat tagtggatcg  180
tcctggaatt ttttaactctc agatttgtac acacctagcc ttcagcaatt tgtgaattac  240
agttcagatt ttcctaccct agcactgggt cccaaagagg tttctgttaa agtatgttgt  300
gattctctcc atctacgact ttctcttctt atttttggga cagaggtttg tcttgtgacc  360
tcacttctct tacagatcta agagtaatgg ttgatttttc aagtttgttc aactttttac  420
ttgttaggat agagtgggtga cttccaagct tcatgcagaa ccggacaaca gaaattgaga  480
gggaaatttc tatgacagaa gagagaaaga agaaaattgc tggaataatg accttgaata  540
gaggaaatgg gatatcatct ggtaagcaaa tagagaagct ggcttttagat aagagcctgg  600
acaattcatt catagaatag cagaaaaggc agaatttatg tccatagatg caagtggtaa  660
angtagatat agtgatggga atttgtaaaa agttaccttc caaatgccan tttttttaaa  720
ngaaattaag gaaancaaan gtcaatcaaa ctcaa                                755

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<210> 4161

<211> 694

<212> DNA

<213> Homo sapiens

<400> 4161

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atcaggatgt ctgagaggag agcatggtgt ttttgcttca ttggatccat gcaggctcttg   60
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tccaggcttc tcatctgtaa ctggtgaagc ccggaagagc ttgttgttca agaggaaatc  180
ttgtgttact tctttatgaa ggactccagc ctggtggaga tgaatgagtc ctgaagatgg  240

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aatcgaagct gtttgggcac aatactttta tcagcattta atgacccagt cgaaaattca 300  
 ttgtttggac ccaagcactg gtgggaaagg caggaggga ggcctgcctt ccttcctccc 360  
 tcccgagccc tacagcaggc catggagtgg tgagcgagtt cgtacagtgc caaccacatt 420  
 cccagaaact tccagcagag gttaatcctg ctctctcaa gtangagaca atgaatggat 480  
 tttacaaat ggactccctg tgtagctaa tgccaagtcc ctactcaacc taggatgact 540  
 ccaatggcgc atgtcccat tcccgggccc taaggctgcg ctaacatgct atcctgcctg 600  
 ccccttcatt ctccaacctg gcacattccc actcctttcc cctcccaana cggaaagnca 660  
 tgncttgac ntgggacacc ccttcatac caan 694

<210> 4162

<211> 752

<212> DNA

<213> Homo sapiens

<400> 4162

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 tgaaattgaa ccaggatgtg ctattagtta atgaatcana aaagggaata ttanatgaag 120  
 ataatgaaaa agaaaaaagg gactcttttag gcaatgaaga atctgttgat aaaacagcat 180  
 gtgaatgtgt aaggagtcca agggagtctt tggatgacct gtttcaaata tgttctccat 240  
 gcgccattgc aagtggncct cggaacgacc tggctgaatt gacaacatta tgtttggagt 300  
 tgaatgtatt gaattctaag atcaaaaagca ccagtggaca tgtggaccac actttgcaac 360  
 agtactctcc tgaaattctg gcttgccagt tctgaagaa gtacnttttt ctctgaact 420  
 tgaaaagagc gaaggagagt atcaagctta gttacagtaa tagcccttct gtttgggata 480  
 cttttattga aggattgaaa gaaatggcaa gttccaatcc tgtgtatatg gagatggaaa 540  
 aaggagatct accaacaagg ttaaagttac tagatgacga ggttcctttt gatagtccgt 600  
 tgttgntgt ttaagctacc cggttgatg aaaagtttg ggaagtctgc tcttccgatc 660  
 cntaatcaag ttctttccan ccattttgcc atcgatatc atnaaacttt ggcancatca 720  
 acctgctgan gtttttgggg ccaatttaaa ca 752

<210> 4163

<211> 665

<212> DNA

<213> Homo sapiens

<400> 4163

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agttggtgag catcatggca accgttacag ccacaaccaa agtcccggag atccgtgatg   60
taacaaggat tgagcgaatc ggtgcccact cccacatccg gggactgggg ctggacgatg   120
ccttggagcc tcggcagctt cctgatgttg tagaaatgcc atggtagccc cacaggaaat   180
cacctcatgt gcgcctccca cccacaggct tcgcaaggca tggtaggtca gctggcggca   240
cggcgggagg ctggcgtggt gctggagatg atccgggaag ggaagattgc cggtcgggca   300
gtccttattg ctggccancc gggcacgggg aagacggcca tcgcatggg catggcgcag   360
gccctgggccc ctgacacgcc attcacagcc atcgccggca gtgaaatctt ctccctggag   420
atgagcaaga ccgangcgct gacgcaggcc ttccggcggt ccatcggcgt tcgcatcaan   480
gaggagacgg agatcatcga aggggagggt gtggagatcc agattgatcg accagcaaca   540
gggacgggct ccaaggtggg caaactgacc ctcaaggacc acaganatgg gagaccatct   600
acgacctgng caccaagatg attgagtccc tgaccaaggg acaangtcca agnncggggg   660
acgtn                                                                    665

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<210> 4164

<211> 733

<212> DNA

<213> Homo sapiens

<400> 4164

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ctttcttgat gccgttacgt ccatggattt tttccagga ttaaatttgg aaggctatcc   60
taacagagac agtacgaaat atgctgagat ttatggcatt tcttctgctc acactttgtt   120
gcggggggaca ctgagatata agggattgga atgctgaata atggattgga atgttgaata   180
atgttgaata ccttcctatg gtatcctccc taactccttc ccttgaacc acccagcccc   240

```



atctatggat atatgaaagc tttgaatgga tttgtaaaaat taggtcttat aaacagagaa 300  
 gcgcttcctg cctttagacc tgaggccaac cctctcaccg ggaaacaact cctctgtgac 360  
 ctagttggga tttcacccctc ctctgagcat gatgtgttga aggaagctgt tcttaagaaa 420  
 ctaggaggag acaataccca gttggaggct gctgaatggt aggcaccac cactcaactt 480  
 agagcaaaat atactgggat caatgattgc taatttctac tcaaaaaaag ttaaataattt 540  
 tacatttgtc tttgattaat tcgttgctcc aatgtgggta gagagattac catgtgccat 600  
 gttcatgtgg gcataaagag tagattaaag agaggagctc aatgggcaat tnagaatttt 660  
 gngaaaatgc ttatctcgaa acactttacc actcagttcc caagcatann ggggggtattt 720  
 ttgctttccn ggt 733

<210> 4165

<211> 690

<212> DNA

<213> Homo sapiens

<400> 4165

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 gttgatggag aaaataatct ttatccttag cctccatctg gttgcagacc ataaagacag 120  
 ggaaaaaatg aggggtgttg tagcttcgtt agaaactgaa agctcactga ttttttcaaa 180  
 acctaaatag cctgtgtttc tccaaataac taatttgcag ccttcggcag ccaggactgg 240  
 cagggatggg gctaggggga ctggggagaa ctgctctctc ctgagggtgg tctgaccoga 300  
 cagcacgcat gaccttccca cagtcaggaa ctgctcagag acgtgatggc aactccatag 360  
 aatgaaatac tcttcagcca gtaaaatgta tttttggata aatatttgct ttaaaaaact 420  
 ttactatatg ttgttaaatg aaaaaaaaac ctttaaggnat cagaaattat gtgcagtaaa 480  
 atctcacttt tgtaaataaa tatacctgtt tactacgtat gcataaaaag aatcctgaga 540  
 aatataagta ctgtatgcat attggttgtt aaagtanttt ttccggttgc ttatctanaa 600  
 ntccnaattt tgcttcaaag gaaaaagttt actccgggca atattaaaaa attaanataa 660  
 ctaattttgg ccttgtcaat caaaaccagn 690

<210> 4166

<211> 731

<212> DNA

<213> Homo sapiens

<400> 4166

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gcaccgggaa aataacaatc gtatttcagg ttgaaagctc ctattactgc tgggttttgg 60
aggctgcgat aaaatcttca tcgacgtgaa ggtaccttct gggttggctt gggtcgtaag 120
tcctaagatg ggggccgtcc ttccctgggg gcagggacgt agggaaccag gcggtgggga 180
gggagaaagg agcgacgagg tcagaggaaa ccttgggttt ccaaggctcc tggggcacca 240
aagggtctcc cgcagtcggg gaattgagcc ctggggagga gccttttgcg agaacgtgag 300
cgcgccccaa cacgcctcag acctcgtaaa cccacttggc aaagaccggg gaagcggctg 360
gcggaaccgac tgcggtgaac tcaagaaatt aacctgcgct gcaactaaac gggctgccgc 420
cctttcacac tcacctcgag cgaccgagat agagaaagct cccgaaccgg ncgcgggggg 480
acttggtcc acctcccgt cccgggagaa gangacaaaa aggggagatg gacttggaat 540
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acgtctagaa gggacaaagg cagcgaagga gattcagaga cccgacgggg aaatggtggc 660
tttcaaggct tctgggtgtt gggttgcgag ggggaaaagg tacnatggnn taaactttcc 720
aatcaannaa t 731
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<210> 4167

<211> 493

<212> DNA

<213> Homo sapiens

<400> 4167

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agccatggag caggcacctc cggaccccga gcggcagctc cagccggcgc ccttggagcc 60
gctgggctcc ccagacgctg ggctgggggc tgcggtcggc aaggaagcgg agggggccgg 120
agaagagagc tctggggtcg acacgatgac acacaataat ttttggttga agaagataga 180
```